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)

Abrams, Burton A.

PD September 1995. **TI** The Effect of Banking Structure on State-Level Economic Growth. **AU** Abrams, Burton A.; Settle, Russell F. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/05; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 8. **PR** not available. **JE** G21, G28. **KW** Banking. States. Regulation. Branch.

AB State-level U.S. data between 1949 and 1981 are used to test for the effects of banking structure on aggregate and sectoral economic growth. The two specific hypotheses tested are that branch-banking prohibitions and the deposit market share held by savings and loan institutions impact upon state-level economic development. No evidence is found to support either of the hypotheses. These findings suggest that liberalizing branching laws to permit regional and even national branching is unlikely to produce the dramatic gains in economic growth often cited proponents of the liberalization.

Adao, Bernardino

PD October 1995. **TI** Beliefs, Competition, and Bank Runs. **AU** Adao, Bernardino; Temzelides, Theodosios. **AA** Adao: University of Minnesota. Temzelides: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/26; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 22. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G21, C62, C72. **KW** Banking. Runs. Game Theory.

AB Within the framework of Diamond-Dybvig (1983), the optimal (run free) outcome is shown to be the unique forward induction equilibrium. In a version of the model that posits Bertrand competition among banks, there are sequential equilibria that imply positive profits. However, the zero-profit contract is supported as the unique equilibrium outcome if the agents' beliefs are restricted to the space of beliefs consistent with the forward induction refinement.

Adelman, Irma

TI Environmental Distortions and Welfare Consequences in a Social Accounting Framework. **AU** Golan, Elise Hardy; Adelman, Irma; Vogel, Stephen.

Aghion, Philippe

PD November 1994. **TI** The Economics of Enterprise Restructuring in Central and Eastern Europe. **AU** Aghion, Philippe; Blanchard, Olivier Jean; Carlin, Wendy. **AA** Aghion: Nuffield College. Blanchard: Massachusetts Institute of Technology. Carlin: Wissenschaftszentrum Berlin. **SR** Centre for Economic Policy Research, Discussion Paper: 1058; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 34. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** P51, P52. **KW** Privatization. Restructuring. Bank Recapitalization. Eastern Europe. Unemployment.

AB This paper begins from the twin observation that on the one hand, privatization which leaves control in the hands of the insiders has produced little restructuring while on the other, state-owned enterprises have engaged in some restructuring even in the absence of a clear prospect of privatization. It situates enterprise restructuring at the heart of the process of transition of the state-owned enterprise sector. A set of theoretical tools is assembled which permits the analysis of the speed and depth of restructuring, and clarifies the roles of managers, employees, the state, and banks in bringing it about. A mapping is provided between the theoretical predications and a large body of anecdotal evidence on enterprise behavior in the Central and East European economies.

Ahmed, Shaghil

PD January 1995. **TI** Government Budget Deficits and Trade Deficits: Are Present-Value Constraints Satisfied in Long-Term Data? **AU** Ahmed, Shaghil; Rogers, John H. **AA** Ahmed: Pennsylvania State University. Rogers: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 494; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 27. **PR** no charge. **JE** C32, E62, F41. **KW** Budget Deficits. Trade Deficits. Cointegration. Present-Value Constraint.

AB We undertake tests of whether long term data from the U.S. and U.K. are consistent with the intertemporal government budget constraint and the intertemporal external borrowing constraint being satisfied in expected value terms, both individually and simultaneously. An historical perspective is appropriate for focusing on whether the present value constraints (PVCs) continue to hold in the face of unusual events, such as the outbreak of wars, that cause a structural break in the short-run dynamic behavior of the variables. This provides a very strong test of whether intertemporal budget constraints are satisfied. Our main results are: (i) the PVCs hold over the whole sample period; and (ii) the data are also consistent with the hypothesis that the PVCs continue to hold following events which cause a structural break in the short-run dynamics.

Aksoy, Tevfik

PD December 1995. **TI** A Panel Analysis of Student Achievement in Mathematics in the United States. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/16; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 19. **PR** not available. **JE** C22, I21. **KW** Math. Tests. Scores. Education.

AB Using rich, new, nationally representative data source, the National Education Longitudinal Study of 1988 (NELS 88), panel techniques are employed to analyze and determine key factors affecting students' achievement in mathematics. The economics of education literature has relied on cross-section data to estimate educational production functions (A study by Gilby, Link, and Mulligan (1993) is an exception to this). One of the main contributions of this study is to use panel data on NELS 88. NELS 88 is an improvement over past data because it is representative of students in the U.S. It is also a panel data set which follows each student in 8th, 10th, and 12th grades. Panel data on nationally representative samples of elementary and secondary students are used to estimate educational production functions using key variables that are commonly investigated in the economics of education literature. Several potential policy changes are suggested and also results are compared with the previous findings in the literature. Some key determinants of achievement are found to be related to how students spend their time outside school--watching television, doing homework, and working in the labor market. Several school related variables are also found to be important, such as the type of the school students attend (private and public), length of the school year, length of each class in minutes, teacher's salary, and race of the student's teacher.

Albaek, Karsten

PD June 1995. **TI** Worker Flows and Job Flows in Danish Manufacturing, 1980-91. **AU** Albaek, Karsten; Sorensen, Bent E. **AA** Albaek: University of Copenhagen. Sorensen: Brown University. **SR** Brown University, Department of Economics Working Paper: 95/18; Department of Economics, Brown University, Providence, RI 02912. **PG** 46. **PR** no charge. **JE** J63. **KW** Labor Demand. Labor Turnover. Job Creation. Quits. Layoffs.

AB This paper examines turnover of workers and jobs on the panel of all plants in Danish manufacturing for the years 1980-1991. We relate worker turnover to job turnover with a focus on the share of worker reallocation driven by job reallocation, and consider the behavior of job and worker flows over the business cycle, throwing light on some recent theories of the cyclical behavior of the labor market. The amount of job creation and job destruction is similar in Denmark and the U.S., but job reallocation in Denmark is acyclical contrary to American findings. The probability of plant closure covaries negatively with the business cycle, in particular for small plants. Worker reallocation is strongly procyclical, due to strong procyclicality of replacement hirings (hiring to an existing job). Our findings are consistent with nonconvex adjustment costs for plant hiring and firing, and with models that explain replacement hirings as driven by worker quits, whereas they seem at odds with theories that view recessions as optimal periods for restructuring the plant labor force.

Albers, Heidi

PD July 1995. **TI** Valuation and Management of Tropical Forests: Implications of Uncertainty and Irreversibility. **AU** Albers, Heidi; Fisher, Anthony C.; Hanemann, W. Michael. **AA** Albers: Stanford University. Fisher and Hanemann: University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 756; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 41. **PR** $10.25 Domestic; $20.50 International Surface Rate. **JE** Q23, D61, D81. **KW** Renewable Resources. Tropical Forests. Valuation. Management. Risk.

AB This paper develops a framework for the valuation and management of tropical forests that reflects their ecological and economic characteristics. The analysis demonstrates the importance of modeling the feasible use patterns and the information structure in tropical forest management decisions. The model predicts that cases exist where the foresighted management of forests leads to more preservation than the traditional expected value approach. An application in Thailand provides evidence that such cases occur in relevant ranges of benefit flows. The model focuses tropical forest management on assessments of sustainability and feasible sequences in light of uncertainty and information flows.

Allen, Franklin

PD November 1994. **TI** A Welfare Comparison of Intermediaries and Financial Markets in Germany and the U.S. **AU** Allen, Franklin; Gale, Douglas. **AA** Allen: University of Pennsylvania. Gale: Boston University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/3; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 62. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G24, G21, D82, D23. **KW** Germany. Financial Intermediation. Institutions. Banking.

AB One of the most striking differences between developed countries is the relative importance of financial markets and intermediaries in different countries. At one extreme, there is Germany, where a few large banks play a dominant role and financial markets are not very important. At the other extreme is the U.S., where financial markets play an important role and the banking industry is much less concentrated. This paper compares the merits of both systems.

PD January 1995. **TI** Financial Markets, Intermediaries, and Intertemporal Smoothing. **AU** Allen, Franklin; Gale, Douglas. **AA** Allen: University of Pennsylvania. Gale: Boston University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/4; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 48. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D91, G14, D23, D51. **KW** Financial Intermediation. Institutions. General Equilibrium.

AB The return of assets that are traded on financial markets are more volatile than the returns offered by intermediaries such as banks and insurance companies. This suggests that individual investors are exposed to more risk in countries which rely heavily on financial markets. In the absence of a complete set of Arrow-Debreu securities, there may be a role for institutions that can smooth asset returns over time. In this paper, we consider one such mechanism. We present an example of an economy in which the incompleteness of financial markets leads to underinvestment in reserves whereas the optimum, for a broad class of welfare functions, requires the holding of large reserves in order to smooth asset returns over time. We then argue that a long-lived intermediary may be able to implement the optimum. However, the position of the intermediary is fragile; competition from financial markets can cause the intertemporal smoothing mechanism to unravel, in which case the intermediary will do no better than the market.

PD March 1995. **TI** Universal Banking, Intertemporal Risk Smoothing, and European Financial Integration. **AU** Allen, Franklin; Gale, Douglas. **AA** Allen: University of Pennsylvania and Federal Reserve Bank of Philadelphia. Gale: Boston University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/6; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 32. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** F36, G28. **KW** Germany. European Union. Financial Intermediation.

AB How should countries' financial system be reformed? This question is of particular importance for the European Union as it moves toward a single unified system. Traditional theory suggests that market-based systems are desirable. This paper argues that this view is too simplistic. Comparing financial systems is a complex issue with many different facets. For example, if markets are incomplete they will be unable to provide optimal risk sharing and intermediaries may be able to do better. It is suggested that while U.S.-style market-based system provide good opportunities for cross-sectional risk sharing, they do not allow intertemporal smoothing. In contrast, for German-style intermediated systems with universal banks the reverse is true.

Alm, James

PD May 1995. **TI** The Relationship Between State and Federal Tax Audits. **AU** Alm, James; Erard, Brian; Feinstein, Jonathan S. **AA** Alm: University of Colorado. Erard: Carleton University. Feinstein: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5134; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $5.00. **JE** H20, H71, H77. **KW** Tax. Audits. IRS. State and Federal.

AB In this paper we present an econometric analysis of state and federal tax audits. We first present results from a survey of state tax administrators. The survey results indicate that most state tax audit programs are small and rely extensively on information provided by the IRS, although some programs are large and sophisticated. We then present results from a detailed econometric analysis of Oregon state and federal tax returns and tax audits for tax year 1987. Our analysis generates three main conclusions. First, Oregon state and IRS selection criteria are similar, but not identical, suggesting that both tax agencies might benefit from greater sharing of information, especially in some audit classes. Second, Oregon state and IRS audit assessments are strongly positively correlated, as expected. Third, we estimate the shadow values associated with providing additional audit resource to the Oregon Department of Revenue and the IRS in various audit classes, and we find that for the IRS, the shadow values range from two to five dollars, while for Oregon the values range from one to three dollars.

Ammer, John

PD February 1995. **TI** Strategic Returns to International Diversification: An Application to the Equity Markets of Europe, Japan, and North America. **AU** Ammer, John; Mei, Jianping. **AA** Ammer: Board of Governors of the Federal Reserve System. Mei: New York University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 502; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 22. **PR** no charge. **JE** E44, F36, G11, G15. **KW** International Markets. Data Decomposition. Systematic Risk.

AB We undertake a decomposition of the risk factor loadings of fifteen national stock market returns from 1972 to 1990, using a variant of the Campbell-Shiller (1988) linearization. We find considerable variation among countries in the relative importance of a cash flow component and a discount rate component in determining the beta with the world equity index return and with other risk factors. Also, the international heterogeneity we find in factor loadings suggests that a global portfolio allows substantial hedging opportunities, presumably deriving from differences in underlying economic structure.

PD September 1995. **TI** When is Monetary Policy Effective? **AU** Ammer, John; Brunner, Allan D. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 520; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 31. **PR** no charge. **JE** C32, E32, E52. **KW** Monetary Policy. Sticky Wages. Sticky Prices. Credit-Rationing.

AB In this paper, we investigate a number of issues that have not been completely addressed in previous studies regarding the possible asymmetric effects of monetary policy. Overall, we interpret our results as weak evidence in favor of sticky-wage and sticky-price theories and strong evidence against credit-rationing theories. First, we find that models that allow for asymmetries with respect to contractionary/expansionary monetary policy fit the data better than models that allow for asymmetries associated with the state of the business cycle. Second, we find that contractionary monetary policy shocks have a much larger effect on output than expansionary policy shocks, although this result is somewhat sensitive to the econometric specification. Finally, we find that monetary policy shocks that occur during economic expansions appear to have about the same effect as shocks that occur during recessions; this result is robust to various econometric specifications.

Anand, Krishnan S.

PD October 1995. **TI** Information and Organization for Horizontal Multimarket Coordination. **AU** Anand, Krishnan S.; Mendelson, Haim. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1359; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 29. **PR** no charge. **JE** L13, D43, L22. **KW** Horizontal Markets. Decision Rights. Institutions.

AB We model the effects of alternative coordination structures on the performance of a firm that faces uncertain demand in multiple horizontal markets. The firm's coordination structure is jointly determined by its decision-rights structure and by its information structure. We compare the performance of decentralized, centralized and distributed structures and study factors that affect the value of coordination.

Anderson, Kym

PD January 1995. **TI** The Political Economy of Coal Subsidies in Europe. **AA** University of Adelaide. **SR** Centre for Economic Policy Research, Discussion Paper: 1089; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 17. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, H21, Q38, Q48. **KW** Political Economy. Coal Subsidies. European Union. Eastern Europe. Trade Liberalization.

AB Both the mining and the burning of coal is pollutive, so one might expect to observe taxes on coal production and consumption. Yet several countries in Western Europe subsidize coal production, and most East European countries subsidize coal consumption. The first part of this paper shows that those subsidies, which are emulated by other rich and poor countries respectively, have become enormous. Neoclassical political economy is used to examine why governments adopt such inappropriate policies when they are so wasteful of resources and damaging to the environment. Several new and offsetting political forces have been at work in Western Europe in recent years though, causing some countries to dismantle their coal producer subsidies. The paper concludes that these pressures for reform will continue to operate in the few remaining protectionist countries such that, if coupled with more commercial diplomatic pressure from coal-exporting countries, they could be sufficient to see the end of such protection by early nest century.

Anderson, Simon P.

PD March 1995. **TI** Privatization and Efficiency in a Differentiated Industry. **AU** Anderson, Simon P.; De Palma, Andre; Thisse, Jacques-Francois. **AA** Anderson: University of Virginia. De Palma: Universite de Geneve, Switzerland. Thisse: CERAS-ENPC. **SR** Centre for Economic Policy Research, Discussion Paper: 1136; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 25. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** L13, L33. **KW** Privatization. Mixed Oligopoly. Product Differentiation.

AB We consider a market in which a public firm competes against private firms, and ask what happens when the public firm is privatized. In the short run, privatization is harmful because all prices rise; the disciplinary role of the public firm is lost. In the long run, privatization leads to further entry; the net effect is beneficial if consumer preference variety is not too weak. A sufficient statistic for welfare to be higher in the long run is that the public form makes a loss. Profitable firms should not be privatized, in contrast with frequent practice.

Arnold, Michael A.

PD March 1996. **TI** Costly Search, Capacity Constraints, and Bertrand Equilibrium Price Dispersion. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 96/2; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 27. **PR** not available. **JE** L13, D43, D23. **KW** Price Dispersion. Oligopoly.

AB This paper analyzes the impact of transaction costs and capacity constraints in a market with homogeneous buyers, and sellers who offer a homogeneous product for sale and compete on price. We characterize conditions under which price dispersion equilibria exist; in equilibrium firms play pure strategies in prices and consumers adopt a symmetric mixed strategy. Price dispersion is possible even though the prices charges by all firms are common knowledge. Furthermore, all firms can earn strictly positive profits in equilibrium without attracting entrants even if there are no fixed entry costs.

Artis, Michael J.

PD March 1995. **TI** Classical Business Cycles for G7 and European Countries. **AU** Artis, Michael J.; Kontolemis, Zenon G.; Osborn, Denise R. **AA** Artis: European University Institute, Italy. Kontolemis and Osborn: University of Manchester. **SR** Centre for Economic Policy Research, Discussion Paper: 1137; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 40. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E32, F41. **KW** Business Cycles. Turning Points. International.

AB This paper proposes classical business cycle turning points for a number of countries based on industrial production. The countries selected are the G7 together with most major European countries. This information enable us to examine the international nature of cyclical movements. In particular, we examine whether cyclical movements are similar across different countries and consider the lead/lag relationships between countries at peaks and troughs.

Asdrubali, Pierfederico

PD February 1995. **TI** Channels of Interstate Risksharing: US 1963-1990. **AU** Asdrubali, Pierfederico; Sorensen, Bent E.; Yosha, Oved. **AA** Asdrubali: Brown University. Sorensen: Brown University and University of Copenhagen. Yosha: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 7/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 21. **PR** no charge. **JE** E21, E62, H71. **KW** Fiscal Federalism. Income and Consumption Smoothing. Regional Economics. Fiscal Policy.

AB We develop a framework for quantifying the amount of risk-sharing among states in the U.S. and construct data which allow us to decompose a shock to gross state product into several components. For the period 1963-1990 we find that 40 percent of shocks to state gross domestic product are smoothed by capital markets, 14 percent are smoothed by the federal government, and 24 percent are smoothed by credit markets. The remaining 22 percent are not smoothed. We decompose the federal government smoothing into subcategories: taxes, transfers, and grants to states, finding, for example, that in comparison to the tax-transfer system, the magnitude of smoothing through the grant system is small (2.7 percent of a shock), and that the unemployment insurance system smoothes 1.8 percent of a shock. Finally, we repeat the analysis for two subperiods, finding that the amount and composition of federal government smoothing is stable through time. However, we detect an increase in the amount of capital market smoothing, a sharp decrease in the amount of credit market smoothing, and a decrease in the overall fraction of a shock smoothed.

PD February 1995. **TI** Channels of Interstate Risksharing: US 1963-1990. **AU** Asdrubali, Pierfederico; Sorensen, Bent E.; Yosha, Oved. **AA** Asdrubali: Brown University. Sorensen: Brown University and University of Copenhagen. Yosha: Brown University and Tel-Aviv University. **SR** Brown University, Department of Economics Working Paper: 95/13; Department of Economics, Brown University, Providence, RI 02912. **PG** 29. **PR** no charge. **JE** E21, E62, H20, H50, H71. **KW** Income Smoothing. Regional Economics. Risksharing. Interstate.
AB See Pierfederico Asdrubali, Brent E. Sorensen and Oved Yosha, "Channels of Interstate Risksharing: US 1963-1990", Tel Aviv Uniersity, Foerder Institute for Economic Research, Working Paper: 7/95, July 1995.

Asea, Patrick

TI Do Taxes Matter for Long-Run Growth?: Harberger's Superneutrality Conjecture. **AU** Mendoza, Enrique G.; Milesi-Ferretti, Gian Maria; Asea, Patrick.

Attanasio, Orazio P.

PD May 1995. **TI** Differential Mortality and Wealth Accumulation. **AU** Attanasio, Orazio P.; Hoynes, Hilary W. **AA** Attanasio: Universita de Bologna and National Bureau of Economic Research. Hoynes: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5126; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** $5.00. **JE** D91, E21, J14. **KW** Asset Accumulation. Life-Cycle Theory. Mortality Rates. Wealth Profile.
AB The issue of asset accumulation and decumulation is central to the life cycle theory of consumer behavior and to many policy questions. One of the main implications of the life cycle model is that assets are decumulated in the last part of life. Most empirical studies in this use cross-sectional data of estimate mean or median wealth-age profiles. The use of cross-sections to estimate the age profile of assets is full of pitfalls. For example, if wealth and mortality are related, in that poorer individuals die younger, one overestimates the last part of the wealth-age profile when using cross-sectional data because means (or other measures of location) are taken over a population which becomes "richer" as it ages. This paper examines the effect of differential mortality on cross-sectional estimates of wealth-age profiles. Our approach is to quantify the dependence of mortality rates on wealth and use these estimates to "correct" wealth-age profiles for sample selection due to differential mortality. We estimate mortality rates as a function of wealth and age for a sample of married couples drawn from the Survey of Income and Program Participation (SIPP). Our results show that accounting for differential mortality produces wealth profiles with significantly more dissaving among the elderly.

Audretsch, David B.

PD November 1994. **TI** Does Firm Size Matter? Evidence on the Impacts of Liquidity Constraints on Firm Investment Behaviour in Germany. **AU** Audretsch, David B.; Elston, Julie Ann. **AA** Centre for Economic Policy Research. **SR** Centre for Economic Policy Research, Discussion Paper: 1072; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 20. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** G21, G24, G31, G32, G33. **KW** Germany. Liquidity Constraints. Investment.
AB This paper examines the link between liquidity constraints and investment behavior on the one hand, and firm size on the other for a large sample of German firms over the time period 1968-85. The results indicate that smaller firms tend to have investment functions which are more sensitive to liquidity constraints than do the larger enterprises. These results support the hypothesis that smaller firms tend to be disadvantaged relative to their larger counterparts in terms of access to finance. Such liquidity constraints are found to exist in Germany only since the mid-1970's, however. Apparently the German model of finance was able to avoid imposing financial constraints on even smaller enterprises prior to the mid-1970's. Since then, however, the evidence suggests that it has not succeeded in avoiding such liquidity constraints, particularly with respect to the finance of smaller enterprises.

PD March 1995. **TI** The Innovation, Unemployment and Competitiveness Challenge in Germany. **AA** Wissenschaftszentrum Berlin fur Sozialforschung (WZB). **SR** Centre for Economic Policy Research, Discussion Paper: 1152; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 35. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** L11, J64, O31, O32. **KW** Germany. Unemployment. Innovation. Competitiveness.
AB The purpose of this paper is to link the twin horns of the European economic dilemma -- unemployment and a loss in international competitiveness -- to a lack of innovative activity. In Germany the Innovationskrise (innovation crisis) combines with the Standortkrise (location crisis) and the Arbeitslosenkrise (unemployment crisis) to form a triad of economic challenges for the 1990s. This paper documents the extent of this economic dilemma confronting Germany as well as the rest of Western Europe and explains how this dilemma developed in the first place. Finally, policies are recommended that can be implemented to overcome this new economic challenge of the 1990s.

Avesani, Renzo G.

PD February 1995. **TI** On the Evolution of Credibility and Flexible Exchange Rate Target Zones. **AU** Avesani, Renzo G.; Gallo, Giampiero M. **AA** Avesani: University of Brescia, Italy. Gallo: University of Florence. **SR** Centre for Economic Policy Research, Discussion Paper: 1123; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F02, F31, F33, F36, F42. **KW** Exchange Rate. Target Zones. Credibility. Sterilized Intervention. Signaling.
AB This paper considers a new approach to the optimal management and analysis of exchange rate target zones by regarding the operation of a target zone as a dynamic signaling game between the monetary authorities and the financial market. A Sequential Open Loop (Feedback) policy of sterilization intervention is proposed that depends critically on the evolution of the policy-marker's credibility as opposed to the open loop precommitment strategy that has been implemented, for instance, in the Exchange Rate Mechanism of the EMS and in the Bretton Woods system. The width of the target zone and realignments are in turn determined optimally given the policy-maker's credibility. A commitment to this

form of flexible target zone is shown through simulation to provide substantial stabilization for the exchange rate while retaining considerable flexibility and robustness in response to shocks.

Bagwell, Kyle

PD July 1995. **TI** Protection and the Business Cycle. **AU** Bagwell, Kyle; Staiger, Robert W. **AA** Bagwell, Northwestern University. Staiger: The University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5168; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** $5.00. **JE** E32, F13, F41. **KW** Business Cycle. Protection. Trade.

AB Empirical studies have repeatedly documented the countercyclical nature of trade barriers. In this paper, we propose a simple theoretical framework that is consistent with this and other empirical regularities in the relationship between protection and the business cycle. We examine the ability of countries to maintain efficiency-enhancing reciprocal trade agreements that control their temptations to resort to beggar-thy-neighbor policies, under the requirement that such agreements are self-enforcing. We find theoretical support for countercyclical movements in protection levels, as the fast growth in trade volume that is associated with a boom phase facilitates the maintenance of more liberal trade policies that can be sustained during a recession phase in which growth is slow. However, we also find that acyclical increase in the level of trade volume give rise to protection, implying that whether rising imports are met with greater liberalization or increased protection depends on whether they are part of a cyclic upward trend in trade volume or an acyclical increase in import levels.

Baliga, Sandeep

PD February 1995. **TI** Negotiations With Side-Deals. **AU** Baliga, Sandeep; Serrano, Roberto. **AA** Baliga: King's College, Cambridge. Serrano: Brown University. **SR** Brown University, Department of Economics Working Paper: 95/9; Department of Economics, Brown University, Providence, RI 02912. **PG** 20. **PR** no charge. **JE** C72, C78. **KW** Side-Deals. Imperfect Information. Negotiation. Bargaining.

AB We study multilateral negotiation procedures that allow for "partial agreements" in which responders are told only their own shares. Our models apply in the case of negotiations under "joint and several liability," as well as to certain disputes over a surplus. We find that there is a unique equilibrium outcome that corresponds to that found in models without imperfect information.

Ball, Laurence M.

PD January 1995. **TI** The Deficit Gamble. **AU** Ball, Laurence M.; Elmendorf, Douglas W.; Mankiw, N. Gregory. **AA** Elmendorf: Congressional Budget Office. Mankiw: Harvard University. Ball: Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 341; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 36. **PR** no charge. **JE** E62, H62, H63, E62. **KW** Budget Deficit. Debt. Overlapping Generations.

AB The historical behavior of interest rates and growth rates in U.S. data suggests that the government can, with a high probability, run temporary budget deficits and then roll over the resulting government debt forever. The purpose of this paper is to document this finding and to examine its implications. Using a standard overlapping-generations model of capital accumulation, we show that whenever a perpetual rollover of debt succeeds, policy can make every generation better off. This conclusion does not imply that deficits are good policy, for an attempt to roll over debt forever might fail. But the adverse effects of deficits, rather than being inevitable, occur with only a small probability.

PD October 1995. **TI** Expectations and the Effects of Monetary Policy. **AU** Ball, Laurence M.; Croushore, Dean. **AA** Ball: Johns Hopkins University. Croushore: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/22; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 28. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** E52, D84. **KW** Rational Expectations. Monetary Transmission. Policy.

AB This paper examines the predictive power of shifts in monetary policy, as measured by changes in the federal funds rate, for output, inflation, and survey expectations of these variables. We find that policy shifts have larger effects on actual output than on expected output, suggesting that agents underestimate the effects of policy on aggregate demand. Our results help to explain the real effects of monetary policy, and they provide a strong rejection of the rational expectations hypothesis.

Barberis, Nicholas

PD May 1995. **TI** How Does Privatization Work? Evidence from the Russian Shops. **AU** Barberis, Nicholas; Boycko, Maxim; Shleifer, Andrei; Tsukanova, Natalia. **AA** Barberis: Harvard University. Boycko: Russian Privatization Center, Russia. Shleifer: Harvard University and National Bureau of Economic Research. Tsukanova: Boston Consulting Group, Russia. **SR** National Bureau of Economic Research, Working Paper: 5136; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** $5.00. **JE** L33, P21. **KW** Privatization. Human Capital. Restructuring. Russia.

AB We use a survey of 452 Russian shops, most of which were privatized between 1992 and 1993, to measure the importance of alternative channels through which privatization promotes restructuring. Restructuring is measured as capital renovation, change in suppliers, increase in hours that stores stay open, and layoffs. There is strong evidence that the presence of new owners and new managers raises the likelihood of restructuring. In contrast, there is no evidence that equity incentives of old managers promote restructuring. The evidence points to the critical role that new human capital plays in economic transformation.

Barro, Robert J.

PD November 1994. **TI** Quality Improvements in Models of Growth. **AU** Barro, Robert J.; Sala-i-Martin, Xavier. **AA** Barro: Harvard University. Sala-i-Martin: Yale University. **SR** Centre for Economic Policy Research, Discussion Paper: 1076; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 41. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** O31, O32, O33, O40,

O41. KW Quality Ladders. Technological Progress. Endogenous Growth. Innovation.
AB Technological progress takes the form of improvements in the quality of an array of intermediate inputs to production. In an equilibrium that is standard in the literature, all research is carried out by outsiders, and success means that the outsider replaces the incumbent as the industry leader. The equilibrium research intensity involves three considerations: leading-edge goods are priced above the competitive level, innovators value the extraction of monopoly rents from predecessors, and innovators regard their successes as temporary. We show that if industry leaders have lower research costs, leaders will carry out all the research in equilibrium. If the cost advantage is not too large, however, the equilibrium research intensity and growth rate depend on the existence of the competitive fringe and take on the same values as in the standard solution. We discuss the departures from Pareto optimality and analyze the determination of the economy's rate of return and growth rate.

PD June 1995. **TI** Technological Diffusion, Convergence, and Growth. **AU** Barro, Robert J.; Sala-i-Martin, Xavier. **AA** Barro: Bank of England, United Kingdom and National Bureau of Economic Research. Sala-i-Martin: University Pompeu Fabra, Spain and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5151; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $5.00. **JE** O31, O34, O47. **KW** Technological Diffusion. Convergence. Growth. Intellectual Property.
AB We construct a model that combines elements of endogenous growth with the convergence implications of the neoclassical growth model. In the long run, the world growth rate is driven by discoveries in the technologically leading economies. Followers converge toward the leaders because copying is cheaper than innovation over some range. A tendency for copying costs to increase reduces the follower's growth rate and thereby generates a pattern of conditional convergence. We discuss how countries are selected to be technological leaders, and we assess welfare implications. Poorly defined intellectual property rights imply that leaders have insufficient incentive to invent and followers have excessive incentive to copy.

Barth, Mary E.

PD July 1995. **TI** International Accounting Differences and Their Relations to Share Process: Evidence form U.K., Australian, and Canadian Firms. **AU** Barth, Mary E.; Clinch, Greg. **AA** Barth: Stanford University. Clinch: University of New South Wales. **SR** Stanford Graduate School of Business Research Paper: 1344; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 50. **PR** no charge. **JE** M41, G32, G12. **KW** International Accounting. Value-Relevance. Financial Reporting. Cross-Listed Firms. Goodwill.
AB We synthesize and extend research exploring differences between U.S. and other countries' Generally Accepted Accounting Procedures (GAAP) by investigating whether difference between domestic and U.S. GAAP for U.S.-listed U.K., Australian, and Canadian firms are associated with firms' returns and prices. The accounting differences we investigate include goodwill, asset reevaluations, income taxes, pensions, interest capitalization, foreign currency, and extractive industries accounting. We conclude that goodwill is priced as an asset; asset reevaluations, successful efforts accounting for extractive industries, and immediate recognition of foreign currency exchange gains and losses on long-term assets and liabilities generally are uncorrelated with information investors consider relevant; and tax accounting liability methods used in the U.K. and Australia add explanatory power beyond the U.S. deferral method, as does accrual pension accounting beyond Australia's cash-based method, and in some specifications, interest capitalization. Our findings suggest that the SEC-required GAAP reconciliation reflects information useful to investors for U.K., Australian, and, to a more limited extent, Canadian firms.

PD September 1995. **TI** Value-Relevance of Bank's Fair Value Disclosures under SFAS 107. **AU** Barth, Mary E.; Beaver, William H.; Landsman, Wayne R. **AA** Barth: Stanford University. Beaver and Landsman: University of North Carolina. **SR** Stanford Graduate School of Business Research Paper: 1343; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 39. **PR** no charge. **JE** Banking. Finance. Default. **KW** Fair Value. Financial Instruments. Value-Relevance. Measurement Error. Nonperforming Loans.
AB SFAS 107 fair value estimates are significant in explaining bank share prices beyond book values. In particular, securities, loans, and long-term debt are value-relevant, although deposits and off-balance sheet items are not. The core deposit intangible proxy also is value- relevant. Proxies for default risk and interest sensitivity also are significant explanatory variables, but their inclusion does not erode the explanatory power of the SFAS 107 variables. The findings also indicate that December 31 share prices partially reflect the SFAS 107 fair value estimates, but using April 30 prices improves their explanatory power, most notably loans.

PD September 1995. **TI** Fundamental Issues Related to Using Fair Value Accounting for Financial Reporting. **AU** Barth, Mary E.; Landsman, Wayne R. **AA** Barth: Stanford University. Landsman: University of North Carolina. **SR** Stanford Graduate School of Business Research Paper: 1345; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 20. **PR** no charge. **JE** M41, G14, G12. **KW** Fair Value Accounting. Financial Reporting. Value-Relevance. Core Earning.
AB This paper discussed fundamental issues relating to implementation of fair value accounting. We conclude that in settings economically equivalent to perfect and complete markets, a fair value accounting- based balance sheet reflects all value-relevant information, the income statement is redundant, income realization is not valuation relevant, and intangible assets relating to management skill, asset synergies, or options are reflected fully in the balance sheet. In settings with more realistic market assumptions, fair value is not well-defined, resulting in three value constructs, entry and exit values and value-in-use. Because these are unobservable, implementation of fair value accounting requires their estimation, potentially introducing estimation error. Unless estimation error is severe, value-in-use is the appropriate construct for firm valuation for going concerns because it captures total firm value associated with an asset. Also, neither the balance sheet nor income statement reflects fully all value-relevant information and income realization potentially can be valuation-relevant, although management discretion can detract from its relevance. We point out that fair value accounting concepts apply equally to assets and liabilities. Finally, our discussion reveals no basis for recognizing in income only

realized gains and losses, and that the concepts of core earning and fair value accounting are unrelated.

PD September 1995. **TI** The Effects of Cross-Sectional Scale Differences on Registration Results in Empirical Accounting Research. **AU** Barth, Mary E.; Kallapur, Sanjay. **AA** Barth: Stanford University. Kallapur: University of Arizona. **SR** Stanford Graduate School of Business Research Paper: 1347; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 26. **PR** no charge. **JE** M41, C21, C51. **KW** Econometrics. Scale. Coefficient Bias. Heteroskedasticity. Simulations. Deflation.

AB This study investigates coefficient bias and heteroscedasticity resulting from scale differences in accounting levels-based research designs analytically and using simulations based on accounting data. Finding indicate that including a scale proxy as an independent variable is more effective than deflation at mitigating coefficient bias, even if the proxy is 95 percent correlated with the true scale factor. In fact, deflation can worsen coefficient bias. Also, deflation often does not noticeably reduce heteroscedasticity and can decrease estimation efficiency. White (1980) standard errors are close to the true ones in regressions using undeflated variables. Replications of specifications in three recent accounting studies confirm the simulation findings. The findings suggest that when scale differences are of concern, accounting researchers should include a scale proxy as an independent variable and report inferences based on White standard errors.

PD September 1995. **TI** Accounting for Financial Instruments: An Option Pricing-based Approach to Measuring Corporate Debt Components. **AU** Barth, Mary E.; Landsman, Wayne R.; Rendleman, Richard J. **AA** Barth: Stanford University. Landsman: University of North Carolina. Rendleman: University of North Carolina. **SR** Stanford Graduate School of Business Research Paper: 1351; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 54. **PR** no charge. **JE** G13, G12, M41. **KW** Financial Instruments. Option Pricing. Corporate Debt. Conversion. Call.

AB Many of the Financial Accounting Standards Board's current agenda items relate to measuring financial instruments' fair values, many of which have option-like characteristics. This study presents evidence on the potential practical applicability of using option pricing theory to account for one financial instrument and its components, corporate debt. We implement two alternative versions of the binomial option pricing approach to estimate values for corporate debt and its components, including straight debt and conversion, call, put, and sinking fund features. Comparisons of total debt model estimates to available market values indicate they are quite close when volatility is implied by the model; model estimates generally exceed market values when it is forced to equal the historical estimate. Components' value estimates empirically are sensitive to estimation order. Most notably, call and conversion features affect each other's estimates, and both affect put feature's estimates. Sensitivity analyses of model estimates to dividend payout and equity volatility assumptions indicate that they vary little with all but extreme changes in these parameters.

PD October 1995. **TI** Factors Influencing Firms' Disclosures About Environmental Liabilities. **AU** Barth, Mary E.; McNichols, Maureen F.; Wilson, G. Peter. **AA** Barth and McNichols: Stanford University. Wilson: Massachusetts Institute of Technology. **SR** Stanford Graduate School of Business Research Paper: 1358; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 23. **PR** no charge. **JE** Q28, D82, L51. **KW** Regulation. Superfund. Environmental Policy.

AB This paper examines factors related to environmental liability disclosure decisions for firms in industries with substantial Superfund site involvement. We hypothesize that the extent of disclosure about environmental liabilities is associated with five factors: (1) regulation, including enforcement activity, (2) management's' information, including site uncertainty and allocation uncertainty, (3) litigation and negotiation concerns, (4) capital market concerns, and (5) other regulatory influence. Our empirical tests examine the association between measures of environmental liability disclosure, based on disclosures in firms' annual reports and Forms 10-K, and proxies for the five factors, based on information from other public sources, including the EPA. We find that all of our hypothesized factors except site uncertainty significantly influence firms' environmental disclosure decisions.

Basu, Susanto

PD December 1995. **TI** Aggregate Productivity and the Productivity of Aggregate. **AU** Basu, Susanto; Fernald, John G. **AA** Basu: University of Michigan and National Bureau of Economic Research. Fernald: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 532; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 50. **PR** no charge. **JE** C43, D24, E32. **KW** Productivity. Aggregation. Imperfect Competition.

AB Explanations of procyclical productivity play a key role in a variety of business-cycle models. Most of these models, however, explain this procyclicality within a representative-firm paradigm. This procedure is misleading. We decompose aggregate productivity changes into several terms, each of which has an economic interpretation. However, many of these terms measure composition effects such as reallocations of inputs across productive units. We apply this decomposition to U.S. data by aggregating from roughly the two-digit level of the private economy. We find that the compositional terms are significantly procyclical. Controlling for these terms virtually eliminates the evidence for increasing returns to scale, and implies that input growth is uncorrelated with technology change.

Bates, David S.

PD May 1995. **TI** Testing Option Pricing Models. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5129; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $5.00. **JE** C22, G12, G13. **KW** Options Pricing. Distributions. Consistency. Volatility.

AB This paper discusses the commonly used methods for testing option pricing models, including the Black-Scholes, constant elasticity of variance, stochastic volatility, and jump-diffusion models. Since options are derivative assets, the central empirical issue is whether the distributions implicit in option prices are consistent with the time series properties of the underlying asset prices. Three relevant aspects of consistency are discussed, corresponding to whether time series-based inferences and option prices agree with respect to volatility, "changes" in volatility, and higher moments. The paper surveys the extensive empirical literature on stock options, options on stock indexes and stock index futures, and options on currencies and currency futures.

Bayoumi, Tamim A.

PD November 1994. **TI** Fiscal Flows in the United States and Canada: Lessons for Monetary Union in Europe. **AU** Bayoumi, Tamim A.; Masson, Paul R. **AA** International Monetary Fund. **SR** Centre for Economic Policy Research, Discussion Paper: 1057; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 33. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** H11, H23, H77. **KW** Fiscal Policy. Monetary Union.

AB Regional flows of federal taxes and transfers within the United States and Canada are used to analyze long-term fiscal flows (the redistributive element) and short-term responses to regional business cycles (the stabilization element). In the United States, long-run flows amount to 22 cents on the dollar while the stabilization effect is 31 cents on the dollar. In Canada, the redistributive effect is larger (39 cents) and the stabilization effect smaller (17 cents). Federal flows appear to depend on the institutional structure of the country concerned. In both countries, however, the redistributive element is considerably larger than the amounts involved in the EC Structural Funds program. As for stabilization, national fiscal policies in the EC appear to have been as effective as federal governments in the United States and Canada in cushioning shocks to incomes.

PD January 1995. **TI** Do Credit Markets Discipline Sovereign Borrowers? Evidence from US States. **AU** Bayoumi, Tamim A.; Goldstein, Morris; Woglom, Geoffrey. **AA** Bayoumi and Goldstein: International Monetary Fund. Woglom: Amherst College. **SR** Centre for Economic Policy Research, Discussion Paper: 1088; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 24. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** G12, H74. **KW** Fiscal Discipline. Credit Markets.

AB The degree to which credit markets discipline sovereign borrowers is investigated by estimating the supply curve for debt faced by US states. The results generally support an optimistic view of the market discipline hypothesis, with credit markets providing incentives for sovereign borrowers to restrain borrowing. While the risk premium on bond yields is estimated to increase only gradually at low levels of debt, this effect appears to become much larger as debt rises. There is also some evidence that credit markets may withhold access to credit at very high levels of debt.

PD May 1995. **TI** A Provincial View of Capital Mobility. **AU** Bayoumi, Tamim A.; Klein, Michael W. **AA** Bayoumi: International Monetary Fund. Klein: Tufts University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5115; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** $5.00. **JE** E21, E25, F15, F36. **KW** Capital Mobility. Financial Integration. Income Consumption.

AB This paper develops a method of testing for zones of financial integration based upon intertemporal considerations and applies it to data on Canadian provincial trade. In a financially-integrated region individuals smooth consumption with respect to movements in aggregate income. Consumption in that region follows income in that region if individuals use only regional capital markets while consumption follows movements in income in broader regions (e.g., national income or world income) if individuals have access to and use capital markets in those broader regions (e.g., the national or global capital markets, respectively). We derive a specification which measures the impact of differential levels of access to capital markets -- different zones of capital mobility -- on the relationship between the regional trade balance and regional, national and global income. This empirical specification is tested using data on trade balances across Canadian provinces. The results indicate full capital mobility within Canada but only partial capital mobility between Canada and the rest of the world.

PD May 1996. **TI** R&D Spillovers and Global Growth. **AU** Bayoumi, Tamim A.; Coe, David T.; Helpman, Elhanan. **AA** Bayoumi and Coe: International Monetary Fund. Helpman: Tel Aviv University and CIAR. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 14/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 26. **PR** no charge. **JE** O31, O41. **KW** Productivity. Research. Development. Spillovers. North-South.

AB We examine the growth promoting roles of R&D, international R&D spillovers, and trade in a world econometric model. A country can raise its total factor productivity by investing in R&D. But countries can also boost their productivity by trading with other countries that have large "stocks of knowledge" from their cumulative R&D activities. We use a special version of MULTIMOD that incorporates R&D spillovers among industrial countries and from industrial countries to developing countries. Our simulations suggest that R&D, R&D spillovers, and trade play important roles in boosting growth in industrial and developing countries.

Bean, Charles

PD January 1995. **TI** British Economic Growth Since 1945: Relative Economic Decline...and Renaissance? **AU** Bean, Charles; Crafts, Nicholas F. R. **AA** Bean: London School of Economics. Crafts: University of Warwick. **SR** Centre for Economic Policy Research, Discussion Paper: 1092; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 53. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** J24, J51, N14, O52. **KW** Economic Growth. Human Capital. Industrial Relations. Factor Productivity. UK.

AB The paper contains a thorough review of explanations for the weak British growth performance of the 1950s through the 1970s and an assessment of the long-term implications of the 1980s attempt to escape from relative decline. The analysis draws on recent work in growth theory and places institutions and government policy at the heart of the growth process. We illustrate the possible adverse effects of industrial relations and social contracts on pre-1979 performance and highlight the difficulty of measuring the role of human capital. We believe the jury is still out on the implications for long-term growth potential of the post-1979 policy changes.

Beaver, William H.

TI Value-Relevance of Bank's Fair Value Disclosures under SFAS 107. **AU** Barth, Mary E.; Beaver, William H.; Landsman, Wayne R.

Beck, Stacie E.

PD December 1995. **TI** Autoregressive Conditional Heteroskedasticity in Commodity Spot Prices. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/10; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 12. **PR** not available. **JE** C22, G12. **KW** Conditional Heteroskedasticity. Commodities.

AB A generalization of Muth's (1961) rational expectations model provides insights into the causes of Autoregressive Conditional Heteroskedasticity (ARCH) processes in commodity prices. The model also shows that the expected price variance is an explanatory variable in price regressions. Hypotheses were tested on price data of fourteen commodities using a variation of Engle, et al. (1987) ARCH-M technique. An ARCH process was found in storable and not in nonstorable commodity data, as expected, however changes in expected price variance have no significant impact on price.

PD April 1996. **TI** Capital Market Integration and Convergence in International Lending Rates. **AU** Beck, Stacie E.; Subramanian, Hariharan. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 96/6; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 12. **PR** not available. **JE** G21, F23, F36. **KW** Banking. International Finance. Capital. Regime Switching.

AB Bank lending is the primary means of allocating capital to real investment projects, but no studies have investigated the degree of international integration in this market. Variations in transactions costs and lending practices impede tests of interest rate parity. A stochastic switching regime model circumvents the problem here. Prime rate and Eurocurrency deposit rate parity are investigated. Since abnormal loan profit margins are eliminated by capital flows, they are examined also. Data are from 1983-1989 for the US, Germany, Japan, the UK, Italy and Switzerland. Estimates showed that loan market integration increased in every country except Japan.

Becker, Robert

PD January 1995. **TI** Stationary Ramsey Equilibrium Under Uncertainty. **AU** Becker, Robert; Zilcha, Itzhak. **AA** Becker: Indiana University. Zilcha: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 1/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 18. **PR** no charge. **JE** D91, D92, E21. **KW** Ramsey Equilibrium. Uncertainty.

AB A Stochastic version of the deterministic Ramsey equilibrium model with heterogeneous households and borrowing constraints is introduced. An example shows that it is possible for agents with different time preference rates to hold capital in a stationary solution, in contrast to the deterministic result in Becker (1980). We establish the existence of a stationary stochastic equilibrium for a class of models.

Beckman, Martin J.

PD November 1995. **TI** Spatial Equilibrium Under Uniform Pricing. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/37; Department of Economics, Brown University, Providence, RI 02912. **PG** 9. **PR** no charge. **JE** R13, R32. **KW** Uniform Pricing. Spatial Equilibrium. Market Areas.

AB Uniform prices are more common in consumer goods industries than are mill prices. We study long-run equilibrium conditions of an industry with uniform pricing and free entry and determine equilibrium price and market area. The maximum number of firms can be calculated when market areas are allowed to overlap and firms will enter until profits become negative. Calculations are based on the assumption of linear costs and linear demand functions.

Beede, David N.

PD May 1995. **TI** Economics of the Generation and Management of Municipal Solid Waste. **AU** Beede, David N.; Bloom, David E. **AA** Beede: U.S. Department of Commerce. Bloom: Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5116; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 94. **PR** $5.00. **JE** I18, K32, O21, R11. **KW** Waste Management. Income. Population. Environmental Quality. Public Health.

AB This paper examines the generation and management of municipal solid waste (MSW) through the lens of economics. We estimate that the global burden of MSW amounted to 1.3 billion metric tons in 1990, or 0.67 kilograms of waste per person per day. Industrial countries account for a disproportionate share of the world's MSW relative to their share of world population, while developing countries account for a disproportionate share of the world's MSW relative to their share of world income. Cross-country and time-series analyses reveal that MSW generation is positively associated, but inelastic, with respect to per capita income, and positively associated and unit elastic with respect to population size. Practices for collecting, processing, and disposing of MSW vary widely across countries, generally in accord with the nature of the waste stream and key features of the environmental and economic context. However, the least efficient practices tend to be found in developing countries, where MSW poses serious threats to local environmental quality and public health. Although considerable evidence indicates that the generation and management of MSW is sensitive to income and price variables, natural incentives to overuse common property and the presence of intergenerational externalities both suggest that private economic behavior will not yield socially optimal outcomes in this area. Community intervention, which may take a variety of forms, may thereby promote the social good, with evidence accumulating that favors arrangements involving the participation of private firms. The average cost of MSW management is likely to grow faster than the pace of urbanization if urbanization outpaces the development of transportation infrastructures. Our calculations also suggest that improvements now in the handling of hazardous MSW will be far less expensive in discounted terms than undoing in the future the damage being caused by current handling practices. Addressing these issues from a rational societal perspective will become increasingly urgent in the future, especially in the developing countries, where urbanization is accelerating and whose MSW we project will increase at an annual rate of 2.7 percent through the year 2010.

Bekaert, Geert

PD September 1995. **TI** Emerging Equity Market Volatility. **AU** Bekaert, Geert; Harvey, Campbell R. **AA** Bekaert: Stanford University and NBER. Harvey: Duke University and NBER. **SR** Stanford Graduate School of Business Research Paper: 1349 ; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 42. **PR** no charge. **JE** G12, G14, G15. **KW** Volatility. Developing Markets. Stocks.

AB Returns in emerging capital markets are very different from returns in developed markets. While most previous research has focused on average returns, we analyze the volatility of the returns in emerging equity markets. We characterize the time-series of volatility in emerging markets and explore the distributional foundations of the variance process. Of particular interest is evidence of asymmetries in volatility and the evolution of the variance process after period of capital market reform. We shed indirect light on the question of capital market integration by exploring the changing influence of world factors on the volatility in emerging markets. Finally, we investigate the cross-section of volatility. We use measures such as asset concentration, market capitalization to GDP, size of the trade sector, cross-sectional volatility of individual securities within each country, turnover, foreign exchange variability and national credit ratings to characterize why volatility is different across emerging markets.

PD January 1996. **TI** On Biases in Tests of the Expectations Hypothesis of the Term Structure of Interest Rates. **AU** Bekaert, Geert; Hodrick, Robert J.; Marshall, David A. **AA** Bekaert: Stanford University and National Bureau of Economic Research. Hodrick: Northwestern University and National Bureau of Economic Research. Marshall: Federal Reserve Bank of Chicago. **SR** Stanford Graduate School of Business Research Paper: 1365; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 20. **PR** no charge. **JE** C15, E43, C22, C52. **KW** Term Structure. Expectations. Persistence. Regime-Switching.

AB We document extreme bias and dispersion in the small sample distributions of five standard regression tests of the expectations hypothesis of the term structure of interest rates. These biases derive from the extreme persistence in short interest rates. We derive approximate analytic expressions for these biases, and we characterize the small-sample distributions of these test statistics under a simple first-order autoregressive data generating process for the short rate. The biases are also present when the short rate is modeled with a more realistic regime-switching process. The differences between the small-sample distributions of test statistics and the asymptotic distributions partially reconcile the different inferences drawn when alternative tests are used to evaluate the expectations hypothesis. In general, the test statistics reject the expectations hypothesis more strongly and uniformly when they are evaluated using the small-sample distributions, as compared to the asymptotic distributions.

PD January 1996. **TI** Targets Zones and Exchange Rates: An Empirical Investigation. **AU** Bekaert, Geert; Gray, Stephen F. **AA** Bekaert: Stanford University and National Bureau of Economic Research. Gray: Duke University. **SR** Stanford Graduate School of Business Research Paper: 1369; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 28. **PR** no charge. **JE** F31, C22, C52, F36. **KW** Foreign Exchange. Rate Target. Econometric Tests.

AB In this paper we develop an empirical model of exchange rates in a target zone. The model is general enough to nest most theoretical and empirical models in the existing literature. We find evidence of two types of jumps in exchange rates. Realignment jumps are those that are associated with the periodic realignments of the target zone and within- the-band-jumps are those that can be accommodated within the current target zone. The exchange rate may jump outside the current target zone band, in the case of a realignment, but when no jump occurs the target zone is credible (there is zero probability of a realignment) and the exchange rate must stay within the band. We incorporate jumps, in general, by conditioning the distribution of exchange rate changes on a jump variable where the probability and size of a jump vary over time as a function of financial and macro-economic variables. With this more general model, we revisit the empirical evidence from the European Monetary System regarding the conditional distribution of exchange rate changes, the credibility of the system, and the size of the foreign exchange risk premia. In contrast to some previous findings, we conclude that the FF/DM rate exhibits considerable non-linearities, realignments are predictable and the credibility of the system did not increase after 1987. Moreover, our model implies that the foreign exchange risk premium becomes large during speculative crises. A comparison with the Deutschemark/Dollar rate suggests that an explicit target zone does have a noticeable affect on the time-series behavior of exchange rates.

Ben-David, Dan

PD February 1995. **TI** Slowdowns and Meltdowns: Post-War Growth Evidence from 74 Countries. **AU** Ben-David, Dan; Papell, David H. **AA** University of Houston. **SR** Centre for Economic Policy Research, Discussion Paper: 1111; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 12. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** C22, O11, O47. **KW** Economic Growth. Slowdowns. Meltdowns.

AB Many countries, both industrialized and developing, appear to have experienced a slowdown in economic growth. We examine a large sample of countries and find that a majority exhibit a significant structural break in their post-war growth rates. In nearly all of these cases, the break was followed by a growth slowdown. The breaks fall into two primary periods which delineate countries by developmental and regional characteristics as well as by the magnitude of the subsequent slowdowns.

PD February 1995. **TI** Trade and Convergence Among Countries. **AA** University of Houston. **SR** Centre for Economic Policy Research, Discussion Paper: 1126; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 21. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F11, F14, O11, O19, O57. **KW** International Trade. Income Convergence. Economic Growth.

AB This paper examines the relationship between trade and income convergence by focusing on groups of countries comprising major trade partners. The majority of these groups exhibited significant convergence. Furthermore, a comparison of the trade-based groups with different, randomly selected, country groupings shows that the former were more likely to exhibit convergence than the latter. Finally, there is evidence that the magnitude of growth in trade is related to the degree of the income convergence among countries.

PD November 1995. **TI** Trade and Convergence Among Countries. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 35/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 17. **PR** no charge. **JE** F02, O41, F15. **KW** International Trade. Income Convergence. Growth.
AB See Dan Ben-David, "Trade and Convergence Among Countries". Centre for Economic Policy Research, Discussion Paper: 1126. February 1995.

PD November 1995. **TI** Convergence Clubs and Diverging Economies. **AA** Tel Aviv University and CEPR. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 40/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 12. **PR** no charge. **JE** O11, O14, O15, E13, E25. **KW** Growth. Income Convergence. Clubs.
AB This paper focuses on the question of income convergence among countries. The convergence methodology used here differs from the common cross-sectional approach. While this study provides some evidence in support of Baumol's finding of convergence clubs among the world's wealthiest countries, it also finds strong evidence of a preponderance of convergence clubs among the world's very poorest countries.

PD November 1995. **TI** Measuring Income Convergence: An Alternative Test. **AA** Tel Aviv University and CEPR. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 41/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 10. **PR** no charge. **JE** E13, O15, E25. **KW** Growth. Income Convergence.
AB This paper details an alternative convergence test to the cross- country regressions commonly used to measure income convergence among countries. While the proposed test and the conventional method are both rooted in the same neoclassical growth framework, the proposed convergence measure permits analysis of very small as well as very large groups of countries. In addition, it enables relatively quick and simple convergence comparisons across groups and can be easily replicated for many different possible country groupings.

PD November 1995. **TI** Convergence Clubs and Subsistence Economies. **AA** Tel Aviv University and CEPR. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 43/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 11. **PR** no charge. **JE** O15, O41, E13. **KW** Growth. Income Convergence. Subsistence Consumption.
AB This paper focuses on one possible explanation for the empirical evidence of income convergence among the world's poorest countries. The emphasis is on combining two older ideas -- labor-augmenting technological progress together with subsistence levels of consumption - - and examining how they compare with recent empirical evidence that points to convergence at both ends of the income spectrum, and to divergence among the countries in-between.

PD January 1996. **TI** Technological Convergence and International Trade. **AU** Ben-David, Dan; Rahman, Atiqur. **AA** Ben-David: Tel Aviv University and CEPR. Rahman: University of Houston. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 4/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 15. **PR** no charge. **JE** C22, O15, O33. **KW** Income Convergence. Technology. International Trade.
AB This paper builds on earlier evidence showing that, while most countries exhibit little evidence of unconditional income convergence, countries that trade heavily with one another tend to exhibit a much higher incidence of convergence. Two alternative explanations for the trade-related convergence are explored here. The first alternative is that trade-related income convergence is due to a convergence in capital-labor ratios. Little support is found for this explanation. The other alternative examined here is that of a trade-related convergence in technologies. This alternative is corroborated by a high incidence of convergence in total factor productivities among countries that trade heavily with one another - an outcome that is not common between these same countries when they are grouped randomly rather than on the basis of trade.

PD January 1996. **TI** Some Evidence on the Continuity of the Growth Process Among the G7 Countries. **AU** Ben-David, Dan; Papell, David H. **AA** Ben-David: Tel Aviv University and CEPR. Papell: University of Houston. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 5/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 14. **PR** no charge. **JE** C22, O11, O41. **KW** Economic Growth. Trend Breaks.
AB The stability of the growth process, whether growth rates are rising, falling, or constant, is one of the central questions of economic growth theory. We use recently developed techniques for identifying structural change in economic time series, and find evidence of multiple breaks in per capita real GDP of the G7 countries over the past 120 years. Once determined, these breaks are used to delineate time periods. While there is some evidence of individual periods of slowdowns, the overall tendency appears to be one of increasing steady state growth over the long run.

Bental, Benjamin

PD August 1995. **TI** A Neoclassical Interpretation of Inflation and Stabilization in Israel. **AU** Bental, Benjamin; Eckstein, Zvi. **AA** Bental: Israel Institute of Technology. Eckstein: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 28/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 18. **PR** no charge. **JE** E24, E31, E41, E63. **KW** Inflation. Employment. Seigniorage. Stabilization. Welfare.
AB This paper uses a version of Sidrauski's model to show that the Israeli data generated throughout years of an inflationary government budget policy, as well as the subsequent period of relative stability, fit well the predictions of a simple, neo-classical framework. Specifically, we show that a single parameter money demand equation derived from the model fits the data over the entire sample-period. The

implied inflation-seigniorage relationship is consistent with the observed fact that while inflation was rising, the inflation-tax revenue remained almost trendless. In addition, we show that the labor supply equation derived from the same model is remarkably consistent with the real wage and employment data over the entire period. In particular, the model and the data do not provide theoretical or empirical evidence for the existence of a "Phillips curve" employment-inflation tradeoff. This success of the model in fitting the data suggests that its policy and welfare implications should be taken seriously. In particular, stabilization can be obtained by balancing the budget without any additional measures such as wage and price controls. Moreover, stabilization can be obtained without any major output losses. In contrast, the welfare loss due to inflation is very substantial, peaking at about 10 percent of GDP at the parameter values estimated by our model.

Ber, Hedva

PD August 1996. **TI** The Post-Issue Performance of IPO Firms When Banking is Concentrated and Universal. **AU** Ber, Hedva; Yafeh, Yishay; Yosha, Oved. **AA** Ber: Bank of Israel. Yafeh: Hebrew University of Jerusalem. Yosha: Tel Aviv University and Brown University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 26/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 23. **PR** no charge. **JE** G21, G23, G34, G28, G32. **KW** Glass-Steagall. Public Offerings. Large Shareholders. Moral Hazard. Monitoring.

AB We study the post-Initial Public Offering (IPO) performance of Israeli manufacturing firms during the period 1991-4, finding a decline in profitability and an increase in General and Administrative Expenses generalized by sales (GAE), reflecting managerial waste. The increase in GAE is responsible for approximately one-fourth of the decline in profitability. We find that large shareholders contribute to higher profitability and lower GAE, confirming the importance of large shareholders for corporate governance. By contrast, we find that bank debt intensity and bank debt concentration do not affect performance. We find no evidence of conflict of interest due to universal banking, and some evidence supporting precisely the opposite -- universal banks actually contribute to the quality of the companies traded on the stock exchange. For example, the post-IPO performance of firms with a bank affiliated leading underwriter is not below (or above) average. In fact, the decline in profits following an IPO for firms with a bank-affiliated leading underwriter that borrow a lot from the same bank is actually smaller. Furthermore, among these firms, those that used a substantial fraction of the IPO proceeds to repay bank debt, exhibited an even smaller decline in profitability. Thus, there is no evidence that the banking conglomerates exploit inside information about firms to float the securities of the lemons.

Berck, Peter

PD December 1995. **TI** A CGE Model for California Tax Policy Analysis: A Review of Literature. **AU** Berck, Peter; Dabalen, Andrew. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 767; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 77. **PR** $19.25 Domestic; $38.50 International Surface Rate. **JE** D58, H24, H21, H22. **KW** Computable Models. Tax Policy. Taxation. Productivity Growth.

AB In a recent law, SB1837, the California legislature required the Department of Finance to use dynamic estimation techniques to analyze "probable behavior responses of tax payers, businesses, and other citizens" to large tax change proposals. This report is a review of the use of Computable General Equilibrium (CGE) models to make dynamic analyses.

Berkovitch, Elazar

PD September 1996. **TI** Managerial Compensation and Capital Structure. **AU** Berkovitch, Elazar; Israel, Ronen; Spiegel, Yossef. **AA** Berkovitch and Spiegel: Tel Aviv University. Israel: University of Michigan. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 29/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 27. **PR** no charge. **JE** G32, J33. **KW** Capital Structure. Managerial Incentives. Managerial Effort. Wage Bargaining.

AB We investigate the interaction between financial structure and managerial compensation and show that debt affects both the probability of managerial replacement (a job effect), and the manager's wage if he is retained (a wage bargaining effect). Our model yields a rich set of predictions including the following: The market values of equity and debt decrease if the manager is replaced. Moreover, the expected cash flow of firms that retain their managers exceeds that of firms that replace their managers. Firms that publicly announce the adoption of a new managerial compensation plan should experience positive price reactions in the capital market as well as strong positive performance following the adoption. Controlling for firm's size, the leverage, managerial compensation, and cash flows of firms that retain their managers are positively correlated. Controlling for firm's size, the probability of managerial turnover and firm value are negatively correlated.

Bernanke, Ben S.

PD June 1995. **TI** Measuring Monetary Policy. **AU** Bernanke, Ben S.; Mihov, Ilian. **AA** Benanke: Princeton University and National Bureau of Economic Research. Mihov: Princeton University. **SR** National Bureau of Economic Research, Working Paper: 5145; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $5.00. **JE** C51, E52, G21. **KW** Monetary Policy. VAR. Bank Reserves. Federal Funds Rate.

AB Extending the approach of Bernanke and Blinder (1992), Strongin (1992), and Christiano, Eichenbaum, and Evans (1994a, 1994b), we develop and apply a VAR-based methodology for measuring the stance of monetary policy. More specifically, we develop a "semi-structural" VAR approach, which extracts information about monetary policy from data on bank reserves and the federal funds rate but leaves the relationships among the macroeconomic variables in the system unrestricted. The methodology nests earlier VAR-based measures and can be used to compare and evaluate these indicators. It can also be used to construct measures of the stance of policy that optimally incorporate estimates of the Fed's operating procedure for any given period. Among existing approaches, we find that innovations to the federal funds rate (Bernanke-Blinder) are a good measure of policy innovations during the periods 1965-79 and 1988- 94; for the period 1979-94 as a whole, innovations to the component of nonborrowed reserves that is orthogonal to total reserves (Strongin) seems to be the best choice. We develop a new measure of policy stance that conforms well to qualitative indicators of policy such as the Boschen-Mills (1991) index. Innovations to our measure lead to reasonable and precisely estimated dynamic responses by variables such as real GDP and the GDP deflator.

PD June 1995. **TI** Inside The Black Box: The Credit Channel of Monetary Policy Transmission. **AU** Bernanke, Ben S.; Gertler, Mark. **AA** Bernanke: Princeton University and National Bureau of Economic Research. Gertler: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5146; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 38. **PR** $5.00. **JE** D82, E52, G21, G24. **KW** Monetary Policy. Transmission Mechanism. Credit Channel. Information.
AB The "credit channel" theory of monetary policy transmission holds that informational frictions in credit markets worsen during tight-money periods. The resulting increase in the external finance premium -- the difference in cost between internal and external funds -- enhances the effects of monetary policy on the real economy. We document the responses of GDP and its components to monetary policy shocks and describe how the credit channel helps explain the facts. We discuss two main components of this mechanism, the balance-sheet channel and the bank lending channel. We argue that forecasting exercises using credit aggregates are not valid tests of this theory.

Bertaut, Carol C.

PD February 1996. **TI** Precautionary Portfolio Behavior from a Life-Cycle Perspective. **AU** Bertaut, Carol C.; Haliassos, Michael. **AA** Bertaut: Board of Governors of the Federal Reserve System. Haliassos: University of Cyprus. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 542; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 40. **PR** no charge. **JE** E21, G11. **KW** Precautionary Motive. Life Cycle. Asset Accumulation. Portfolio Choice.
AB The literature on asset accumulation by households draws a sharp distinction between "short-run" precautionary motives to buffer annual consumption from annual labor income shocks, and "long-run" life cycle considerations under labor income certainty. However, empirical estimates of the persistence of shocks to annual incomes imply that households are subject to considerable career uncertainty. We study long-run precautionary motives for life-cycle wealth accumulation and portfolio choice. We compute optimal portfolios under three sources of uncertainty (stock returns, incomes, and lifespan), and explore the separate contributions of several key factors for mean and median asset holdings, including education, risk aversion, household heterogeneity, utility from bequests, time preference, and variance and serial correlation of income shocks. Numerical solutions for households in three education groups are compared with data from the most recent and comprehensive source, the 1992 Survey of Consumer Finances.

Bertocchi, Graziella

PD February 1995. **TI** Growth Under Uncertainty With Experimentation. **AU** Bertocchi, Graziella; Spagat, Michael. **AA** Bertocchi: Universita di Modena, Italy. Spagat: Brown University. **SR** Brown University, Department of Economics Working Paper: 95/12; Department of Economics, Brown University, Providence, RI 02912. **PG** 27. **PR** no charge. **JE** D83, D92. **KW** Growth. Uncertainty. Experimentation. Bayesian Learning.
AB We introduce Bayesian learning into a stochastic growth model and study the dynamic effects of experimentation on the optimal level of the investment decision and on the amount of information gathering. The "dynamic experimentation effect" is shown to consist of two terms: a "pure information effect" and a "capital feedback effect". Surprisingly, when more investment produces more information, dynamic experimentation can push towards a lower level of investment, thus reducing information acquisition. Symmetrically, when more investment reduces information, dynamic experimentation can increase investment and again decrease information gathering.

Bianchi, Marco

PD December 1994. **TI** Unemployment Persistence: Does the Size of the Shock Matter? **AU** Bianchi, Marco; Zoega, Gylfi. **AA** Bianchi: Bank of England. Zoega: Birkbeck College. **SR** Centre for Economic Policy Research, Discussion Paper: 1082; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 43. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** C22, L24, L32. **KW** World Unemployment. Macroeconomic Policy. Equilibrium Unemployment. Hysteresis. Shifting Mean.
AB This paper is an empirical investigation of unemployment rate series in 17 countries. The timing and size of shifts in the mean rate of unemployment are estimated. The size of the shifts and the remaining persistence in the unemployment rate series are then related to institutional differences between the countries. The observed persistence in the unemployment hysteresis arises following large shocks to unemployment, but not following small changes. These results pose a challenge to theorists since none of the existing models of hysteresis have this property.

Blanchard, Olivier Jean

TI The Economics of Enterprise Restructuring in Central and Eastern Europe. **AU** Aghion, Philippe; Blanchard, Olivier Jean; Carlin, Wendy.

Bloom, David E.

TI Economics of the Generation and Management of Municipal Solid Waste. **AU** Beede, David N.; Bloom, David E.

PD June 1995. **TI** Does The Aids Epidemic Really Threaten Economic Growth? **AU** Bloom, David E.; Mahal, Ajay S. **AA** Bloom: Columbia University and National Bureau of Economic Research. Mahal: Barnard College. **SR** National Bureau of Economic Research, Working Paper: 5148; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** $5.00. **JE** I18, O47. **KW** AIDS Epidemic. Growth.
AB This study examines the claim that the AIDS epidemic will slow the pace of economic growth. We do this by examining the association, across fifty-one developing and industrial countries for which we were able to assemble data, between changes in the prevalence of AIDS and the rate of growth of GDP per capita. Our analysis uses well-established

empirical growth models to control for a variety of factors possibly correlated with AIDS prevalence that might also influence growth. We also account for possible simultaneity in the relationship between AIDS and economic growth. Our main finding is that the AIDS epidemic has had an insignificant effect on the growth rate of per capita income, with no evidence of reverse causality. We also find evidence that the insignificant effects of AIDS on income per capita is qualitatively similar to an insignificant effect on wages of the Black Death in England and France during the Middle Ages and an insignificant effect on output per capita of influenza in India during 1918-19.

Booth, Alison L.

PD December 1994. **TI** The Unemployment Implications of Mandatory Firing Cost. **AA** University of Essex. **SR** Centre for Economic Policy Research, Discussion Paper: 1096; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** J32, J33, J51, J65. **KW** Employment Protection. Contracts. Firing Costs. Unions.

AB The model developed in this paper examines the relationship between firing costs and unemployment in a simple two-period model with uncertainty. Where there are long-term employment relationships, and where risk-averse workers and risk-neutral firms bargain over wages and firing costs, average unemployment is unlikely to be affected by statutory firing costs, although firms' profits will decline if the statutory level exceeds the bargained level. In a unionized sector with no bargaining over firing costs, the presence of statutory firing costs reduces employment distortions associated with trade unions. However, where there are no gains to employers to long-term labor relationships, the introduction of mandated firing costs will be associated with a higher incidence of temporary employment contracts and short-term jobs.

PD December 1994. **TI** Coverage by Incremental Scales. **AU** Booth, Alison L.; Frank, Jeff. **AA** Booth: University of Essex. Frank: University of London. **SR** Centre for Economic Policy Research, Discussion Paper: 1097; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 17. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** J31, J33, J41, J51. **KW** Seniority. Merit Pay. Earnings. Unions.

AB This paper uses the British Household Panel Survey to investigate when seniority is rewarded by automatic incremental scales. Scales are seen as an alternative to individual merit pay. They are likely to be used when individual productivity is hard to measure, when firms provide all workers with similar levels of training and when workers have sufficient bargaining power to gain insurance against mis-measurement in the allocation of merit pay. The data provide support for these hypotheses.

PD December 1994. **TI** Quiting Externalities, Employment Cyclicality and Firing Costs. **AU** Booth, Alison L.; Zoega, Gylfi. **AA** Booth: University of Essex. Zoega: Birkbeck College. **SR** Centre for Economic Policy Research, Discussion Paper: 1101; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 34. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E32, J23, J24, J41. **KW** Quitting Externalities. Human Capital. Employment Cyclicality. Redundancy Payments.

AB This paper derives a model in which workers have firm-specific and industry-specific skills, and in each period there is a non-zero probability that a worker quits. This makes the private discount factor, used by firms in making decisions about hiring and training new workers and firing existing ones, higher than the social one. As a consequence, not only do firms under invest in training but employment becomes too cyclical. Firms are too quick to dispose of their human capital in a cyclical downturn because it is of less value to them than it is to society. This provides a rationale for state-mandated redundancy payments as a second-best remedy to overcome the market failure.

Boozer, Michael

PD June 1995. **TI** Intraschool Variation in Class Size: Patterns and Implications. **AU** Boozer, Michael; Rouse, Cecilia. **AA** Boozer: Yale University. Rouse: Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5144; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** $5.00. **JE** I21, J31. **KW** Wage Gap. Racial Differences. School Quality. Class Size. Pupil- Teacher Ratio.

AB Economists attempting to explain the widening of the black-white wage gap in the late 1970s by differences in school quality have been faced with the problem that recent data reveal virtually no gap in the quality of schools attended by blacks and whites using a variety of measures. In this paper, we reexamine racial differences in school quality. We begin by considering the effects of using the pupil-teacher ratio, rather than the school's average class size, in an education production function since the pupil-teacher ratio is a rough proxy, at best. Second, we consider the importance of using actual class size rather than school- level measures of class size. We find that while the pupil-teacher ratio and average class size are correlated, the pupil-teacher ratio is systematically less than or equal to the average class size. Mathematically, part of the difference is due to the intraschool allocation of teachers to classes. As a result, while the pupil-teacher ratio suggest no black-white differences in class size, measures of the school's average class size suggest that blacks are in larger classes. Further, the two measures result in differing estimates of the importance of class size in an education production function. We also conclude that school level measures may obscure important within-school variation in class size due to the small class sizes for compensatory education. Since black students are more likely to be assigned to compensatory education classes, a kind of aggregation bias results. We find that not only are blacks in schools with larger average class sizes, but they are also in larger classes within schools, conditional on class type. The intraschool class size patterns suggest that using within-school variation in education production functions is not a perfect solution to aggregation problems because of non-random assignment of students to classes of differing sizes. However, once the selection problem has been addressed, it appears that smaller classes at the eight grade lead to larger test score gains from eighth to tenth grade and that differences in class size can explain approximately 15 percent of the black-white difference in educational achievement.

Bound, John

PD June 1995. **TI** Race and Education Differences in

Disability Status and Labor Force Attachment. **AU** Bound, John; Schoenbaum, Michael; Waidmann, Timothy. **AA** Bound: University of Michigan and National Bureau of Economic Research. Schoenbaum and Waidmann: University of Michigan. **SR** National Bureau of Economic Research, Working Paper: 5159; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 46. **PR** $5.00. **JE** I21, J15, J28, J71. **KW** Labor Force. Participation Rate. Education Level. Racial Differences. Health Characteristics.

AB The labor force participation rates of older, working-aged black men and men with lower levels of education have historically been significantly lower than those of white men and men with more education, respectively. This paper uses data from the alpha release of the new Health and Retirement Survey (HRS) to examine the extent to which variation in health and job characteristics can account for these differences. Our analysis suggests that race and education differences in the health status of middle-aged men can explain a substantial fraction of black/white differences in labor force attachment and essentially all of the gap between men with different levels of education.

TI Worker Adaptation and Employer Accommodation Following The Onset of a Health Impairment. **AU** Daly, Mary C.; Bound, John.

Bovenberg, A. Lans

PD May 1995. **TI** Costs of Environmentally Motivated Taxes in the Presence of Other Taxes: General Equilibrium Analyses. **AU** Bovenberg, A. Lans; Goulder, Lawrence H. **AA** Bovenberg: Tilburg University. Goulder: Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5117; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** $5.00. **JE** D58, H21, H24. **KW** Tax Shifting. Environmental Tax. Costs. General Equilibrium.

AB There has been keen interest in recent years in environmentally motivated or "green" tax reforms. This paper employs analytical and numerical general equilibrium models to investigate the costs of such reforms, concentrating on the question of whether these costs can be eliminated when revenues from new environmental taxes are devoted to cuts in marginal income tax rates. A distinguishing feature of the analytical model is its attention to the role of pre-existing inefficiencies in the tax treatment of labor and capital and the associated role of tax-shifting. This model indicates how the prospects for a zero -- or negative -- cost environmental tax reform are enhanced to the extent that environmental tax reforms shift the tax burden toward the less efficient (undertaxed) factor. Results from the numerical model are interpreted in light of the analytical model's findings. These results indicate that the revenue-neutral substitution of Btu or gasoline taxes for typical income taxes usually entails positive gross costs to the economy. In the case of the gasoline tax, a significant tax shifting effect serves to lower the policy's gross costs. This accounts for the lower gross cost of the gasoline tax compared with the Btu tax. Under neither policy is tax-shifting substantial enough to eliminate the overall gross costs.

Bowman, David

PD February 1995. **TI** Constrained Suboptimally in Economies with Limited Communication. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 497; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 28. **PR** no charge. **JE** D52, D82, D83. **KW** Limited Communication. Constrained Suboptimality. Search.

AB Economies with limited communication contain an externality which typically makes them Pareto inefficient, even taking into account the communication constraints agents face. In a two period model it is shown that an open and dense set of economies with limited communication are constrained Pareto suboptimal. Thus equilibria of economies with voluntary unemployment, search, or other types of limits on communication are unlikely to be Pareto optimal, even in the absence of moral hazard, adverse selection, or search externalities.

PD June 1995. **TI** Options, Sunspots, and the Creation of Uncertainty. **AU** Bowman, David; Faust, Jon. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 510; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 24. **PR** no charge. **JE** D52, D84, G12. **KW** Options. Derivatives. Sunspots. Incomplete Markets.

AB We present a model in which the addition of an option market leads to sunspot equilibria in an economy which has no sunspot equilibrium before the market is introduced. This phenomenon occurs because the payoff of an option contract is contingent upon market prices, and while prices are taken as exogenous by individuals within the economy they are endogenous to the economy as a whole. Our results provide robust counterexamples to the two most prevalent views of options markets in finance. Following Ross [1976], it is often assumed that the addition of option contracts to an incomplete markets economy can help complete markets. We demonstrate that the addition of option markets can instead increase the number of events which agents need to insure against. Following Black-Scholes [1973], it is often assumed that the economy is such that options are redundant. We demonstrate equilibria in which an added option market is not redundant even when markets were complete before its introduction.

Boycko, Maxim

TI How Does Privatization Work? Evidence from the Russian Shops. **AU** Barberis, Nicholas; Boycko, Maxim; Shleifer, Andrei; Tsukanova, Natalia.

Bresnahan, Timothy, F.

PD August 1996. **TI** Market Segmentation and the Sources of Rents from Innovation: Personal Computers in the Late 1980s. **AU** Bresnahan, Timothy, F.; Stern, Scott; Trajtenberg, Manuel. **AA** Bresnahan: Stanford University and National Bureau of Economic Research. Stern: MIT Sloan School and National Bureau of Economic Research. Trajtenberg: Tel Aviv University and National Bureau of Economic Research. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 25/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 31. **PR** no charge. **JE** L15, L63, O33. **KW** Innovation. Personal Computers. Product Differentiation.

AB This paper evaluates the sources of transitory market power in the market for personal computers (PCs) during the late 1980s. Our analysis is motivated by the coexistence of low barriers to entry into the PC industry and high rates of innovative investment by a small number of PC manufacturers. We attempt to understand these competing phenomena by measuring the role that different principles of product differentiation (PDs) may have played in segmenting this dynamic market. Each PD reflects some notion of product similarity and offers a potential source of market segmentation, in that products which share similar characteristics may be closer substitutes than products which belong to separate groups. Our first PD measures the substitutability between Frontier and Non-Frontier products, where the technological frontier is defined to include those computers which incorporate the Intel 80386 chip. The second PD measures the differentiation between those products sold by brand- name firms (IBM, Compaq, etc...) and those products sold by the non-branded fringe. Our modeling strategy is flexible enough so that neither PD is assumed, a priori, to be more important than the other. Expanding upon recent advances in the measurement of product differentiation, we measure the separate roles that technical advance (incorporating the 80386) and branding (e.g., by IBM) played in contributing to transitory market power. In so doing, this paper attempts to account precisely for the market origins of innovative rents in the PC industry. Our principal funding is that, during the late 1980s, the PC market was indeed highly segmented along both the Branded (B versus NB) and Frontier (F versus NF) dimensions.

Brown, Kenneth

PD May 1995. **TI** How Much Better is Bigger, Faster & Cheaper? Buyer Benefits from Innovation in Mainframe Computers in the 1980s. **AU** Brown, Kenneth; Greenstein, Shane M. **AA** Brown: University of Northern Iowa, Cedar Falls. Greenstein: University of Illinois, Urbana-Champaign and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5138; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** $5.00. **JE** C43, L63, O33. **KW** Technological Change. Mainframe Computers. Demand. Cost-of-Living.

AB This paper develops and estimates cost-of-living indexes (e.g., Fisher and Griliches [1995]) for measuring buyer benefits from technical change in the commercial mainframe computer industry in the 1980s. For this purpose we use a micro-econometric model of demand for product characteristics embodied in a computer system. The model highlights buyers' benefits from technical change when innovation decreases the price of characteristics or increases the range of available characteristics. This exercise follows in the spirit of Trajtenberg [1989]. Our main finding is that our utility-based cost-of-living index declines rapidly (approximately 10-15 percent per year). By historical standards for innovation, this rate is quite fast. Second, our estimates contrast with the rate of change in quality adjusted prices in mainframe computers (approximately 25-30 percent per year). Third, while large price declines induced increases in purchasing, most buyers began the 1980s with a "small" mainframe system and still bought a small system at the end of the decade, even with rapidly declining mainframe prices and large extensions in computing capacity. The experience of the majority outweighs the benefits received by the few (with elastic demand) who took advantage of lower prices and extensions in the product space.

Brunner, Allan D.

PD June 1995. **TI** Bank Lending and Economic Activity in Japan: Did "Financial Factors" Contribute to the Recent Downturn? **AU** Brunner, Allan D.; Kamin, Steven B. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 513; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 42. **PR** no charge. **JE** C51, E32, O53. **KW** Business Fluctuations. Bank Credit. Japan.

AB In this paper, we examine the role of "financial factors" in Japan and attempt to gauge their recent impact on the Japanese economy. First, we find that proxies for financial factors enter significantly in behavioral equations for loan standards, loan demand and aggregate demand, although these proxies explain only a small amount of the variation in those variables. Second, there is some, albeit inconclusive, evidence that balance-sheet problems of households and firms contributed to Japan's recent recession. We find that exogenous declines in equity prices contributed significantly to the decline in loans and economic activity, although part of this influence appears to be operating through traditional wealth effects. In addition, loan demand shocks, which could reflect balance-sheet problems not captured by our model, account for much of the remainder of the shortfall in loans and some of the shortfall in economic activity. Finally, we also find some evidence that an exogenous contraction in loan supply, a "credit crunch," may have lowered output by a small degree, but only in the early phases of the recession.

TI When is Monetary Policy Effective? **AU** Ammer, John; Brunner, Allan D.

PD September 1995. **TI** Excess Returns and Risk at the Long End of the Treasury Market: An EGARCH-M Approach. **AU** Brunner, Allan D.; Simon, David P. **AA** Brunner: Board of Governors of the Federal Reserve System. Simon: Bentley College. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 522; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 20. **PR** no charge. **JE** C22, G12, G14. **KW** Excess Returns. Risk Premium. Volatility. EGARCH-M.

AB This paper models weekly excess returns of 10-year Treasury notes and long-term Treasury bonds from 1968 through 1993 using an exponential generalized autoregressive conditional heteroskedasticity in mean (EGARCH-M) approach. The results indicate the presence of conditional heteroskedasticity and a strong tendency for the ex-ante volatility of excess returns to increase more following negative excess return innovations compared to positive innovations of equal magnitude. In addition, increases in ex-ante volatility are associated in some subperiods with rising excess returns on longer-term instruments, although the slope of the yield curve and lagged excess returns generally remain significant predictors of excess returns.

PD January 1996. **TI** Using Measures of Expectations to Identify the Effects of a Monetary Policy Shock. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 537.; Division of International

Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 34. **PR** no charge. **JE** C32, E52. **KW** Expectations Measures. VAR Models. Monetary Policy Shocks.

AB This paper considers an alternative econometric approach to the VAR methodology for identifying and estimating the effects of monetary policy shocks. The alternative approach incorporates available measures of market participants' expectations of economic variables in order to calculate economic innovations to those variables. In general, expectations measures should provide important additional information relative to a standard VAR analysis, since market participants presumably use a much richer information set than that assumed in a typical VAR model. The resulting innovations are easily incorporated in a VAR-like framework. The empirical results are quite surprising. First, when expectations are incorporated, the variance of all innovations is reduced substantially. Second, innovations to the federal funds rate derived using the alternative approach are only somewhat correlated with their VAR counterparts, while innovations to other economic variables are essentially uncorrelated. Still, monetary policy shocks derived using the two approaches are also somewhat correlated, since innovations to prices and economic activity explain only a small fraction of innovations to the federal funds rate. As a consequence, the impulse responses of economic variables to the two sets of monetary policy shocks have remarkably similar properties.

Bufman, Gil

TI Searching for Nominal Anchors in Shock-Prone Economies in the 1990s: Inflation Targets and Exchange Rate Bands. **AU** Leiderman, Leonardo; Bufman, Gil.

Buiter, Willem H.

PD May 1995. **TI** Capital Mobility, Fiscal Policy and Growth Under Self-Financing of Human Capital Formation. **AU** Buiter, Willem H.; Kletzer, Kenneth M. **AA** Buiter: University of Cambridge and National Bureau of Economic Research. Kletzer: University of California, Santa Cruz. **SR** National Bureau of Economic Research, Working Paper: 5120; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** $5.00. **JE** D92, E22, F34, J24. **KW** Human Capital. OLG Model. Capital Mobility. Fiscal Policy. Productivity.

AB This paper considers the effects of fiscal and financial policy on economic growth in open and closed economies when human capital formation by young households is constrained by the illiquidity of human wealth. Both endogenous and exogenous growth versions of the basic OLG model are analyzed. We find that intergenerational redistribution policies that discourage physical capital formation may encourage human capital formation. Despite common technologies and perfect international mobility of financial capital, the non-tradedness of human capital and the illiquidity of human wealth make for persistent differences in productivity growth rates (in the endogenous growth version of the model) or in their levels (in the exogenous growth version). We also consider the productivity growth (or level) effects of public spending on education and of the distortionary taxation of financial asset income.

PD June 1995. **TI** A Center-Periphery Model of Monetary Coordination and Exchange Rates Crises. **AU** Buiter, Willem H.; Corsetti, Giancarlo; Pesenti, Paolo A. **AA** Buiter: University of Cambridge and National Bureau of Economic Research. Corsetti: University of Rome III. Pesenti: Princeton University. **SR** National Bureau of Economic Research, Working Paper: 5140; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 37. **PR** $5.00. **JE** E31, F31, F42. **KW** Inflation. Exchange Rates. Crisis. Cooperation. Speculative Attacks.

AB The paper analyzes the modalities and consequences of a breakdown of cooperation between the monetary authorities of inflation-prone Periphery Countries that use an exchange rate peg as an anti- inflationary device when the Center is hit by an aggregate demand shock. Cooperation in the Periphery is constrained to be symmetric; costs and benefits must be equal for all. Our model suggests that there are at least two ways in which a generalized crisis of the exchange rate system may emerge. The first is when the constrained cooperative response of the Periphery is a moderate common devaluation while the non-cooperative equilibrium has large devaluations by a few countries. An exchange rate crisis emerges if Periphery countries give in to their individual incentives to renege on the cooperative agreement. In the second case, the Center shock is not large enough to trigger a general devaluation in the constrained cooperative equilibrium; yet some of the Periphery countries would devalue in the Nash equilibrium, making the monetary stance in the system more expansionary. In this case, reversion to Nash is collectively rational. We offer this model as a useful parable for interpreting the collapse of the ERM in 1992-93.

Burda, Michael C.

PD February 1995. **TI** The Impact of Active Labor Market Policies: A Closer Look At The Czech and Slovak Republics. **AU** Burda, Michael C.; Lubyova, Martina. **AA** Burda: Humboldt Universitat zu Berlin. Lubyova: Charles University, Czech Republic. **SR** Centre for Economic Policy Research, Discussion Paper: 1102.; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 36. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E24, J68, P52. **KW** Unemployment. Labor Market. Matching Function. Czech Republic. Slovak Republic.

AB This paper investigates the impact of active labor market policies (ALMPs) in the Czech Republic and Slovakia over the period 1991-4. Econometric results suggest that levels of these policies -- including a dramatic reduction of ALMP spending in Slovakia by more than two-thirds in 1993 -- contributed to the divergence in labor market outcomes in the two countries. All other things equal, raising average Slovak district ALMP spending in 1993 to 1992 levels would have been associated with at least a 30 per cent increase in monthly outflows out of unemployment into jobs. While aggregate ALMPs are positively associated with aggregate vacancies, cross-sectional correlation at the district level is negative in the Czech Republic, suggesting a degree of local responsiveness which is less evident in Slovakia.

Burgelman, Robert A.

PD December 1995. **TI** Strategic Dissonance. **AU** Burgelman, Robert A.; Grove, Andrew S. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1364; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 23. **PR** no charge. **JE** M14, L21.

KW Organization. Corporate Culture.
AB Firms in high-technology industries frequently face the dangers and opportunities associated with strategic inflection points in their development trajectory. Strategic inflection points (SIP's) are caused by changes in fundamental industry dynamics, winning strategies, and dominant technologies. SIP's generate strategic dissonance in the organization because they are associated with divergences between the basis of competition and the firm's distinctive competence, and between top management's strategic intent and strategic dissonance to develop new strategic intent and lead the organization through the turbulence and uncertainty associated with SIP's. This requires a capacity for strategic recognition on the part of top and senior management. Strategic recognition is facilitated by an internal selection environment that allocates resources based on competitive reality and values dissent and debate. Strategic recognition is the foundation for exerting strategic leadership: encouraging debate and bringing debate to a conclusion that realigns the basis of competition and distinctive competence, and strategy and action.

Burgess, Simon

PD February 1994. TI Job Flows, Worker Flows and Churning. AU Burgess, Simon; Lane, Julia; Stevens, David. AA Burgess: University of Bristol. Lane: The American University. Stevens: University of Baltimore. SR Centre for Economic Policy Research, Discussion Paper: 1125; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 44. PR 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. JE E32, J23, J63. KW Job Flows. Worker Flows. Labor Reallocation.
AB We utilize a large firm-level panel dataset to explore the links between gross job flows and gross worker flows. Our findings have relevance for models of job creation and destruction, of labor reallocation and of employment adjustment costs. We find churning flows (the difference between worker and job flows at the firm) to be high, pervasive, and highly persistent over time within firms. We find the dynamic relationship between job and worker flows to be quite complex; lagged job flows raise churning flows, but the effect of churning flows on job flows is asymmetric.

PD December 1994. TI Lifetime Jobs and Transient Jobs: Job Tenure in Britain 1975-91. AU Burgess, Simon; Rees, Hedley. AA University of Bristol. SR Centre for Economic Policy Research, Discussion Paper: 1098; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 43. PR 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. JE J62, J63. KW Job Tenure. Separation Rate. Labor Turnover.
AB We examine 17 years of a large cross-section to build up a picture of job tenure in Britain. We show that men (women) can expect to hold their present job for about 18 (12) years. These summarize bimodal distributions, with one mode at short tenures and one at very long tenures. We find some change in the mean job tenure: a decrease in elapsed tenure of about 10 per cent between 1982 and 1991. These are important changes, but they do not support the view that the dramatic changes in the labor market, technology and competition have spelled the end of jobs for life.

Burke, Mary

TI The Coase Conjecture in Continuous Time: Imperfect Durability, Endogenous Durability, and Aftermarkets. AU Hamilton, Bruce W.; Burke, Mary.

Burnside, Craig

PD May 1995. TI Capital Utilization and Returns to Scale. AU Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio. AA Burnside: University of Pittsburgh. Eichenbaum: Northwestern University and National Bureau of Economic Research. Rebelo: University of Rochester and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5125; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR $5.00. JE E22, E32, J24. KW Capital Utilization. Labor Productivity. Electricity Consumption. Cyclical Movements.
AB This paper studies the implications of procyclical capital utilization rates for inference regarding cyclical movements in labor productivity and the degree of returns to scale. We organize our investigation around five questions that we study using a measure of capital services based on electricity consumption: (1) Is the phenomenon of near or actual short run increasing returns to labor (SRIRL) an artifact of the failure to accurately measure capital utilization rates? (2) Can we find a significant role for capital services in aggregate and industry level production technologies? (3) Is there evidence against the hypothesis of constant returns to scale? (4) Can we reject the notion that the residuals in our estimated production functions represent technology shocks? (5) How does correcting for cyclical variations in capital services affect the statistical properties of estimated aggregate technology shocks? The answer to the first two questions is: yes. The answer to the third and fourth questions is: no. The answer to the fifth question is: a lot.

Butkiewicz, James L.

PD December 1995. TI The Reconstruction Finance Corporation, the Gold Standard, and the Banking Panic of 1933. AA University of Delaware. SR University of Delaware, Department of Economics, Working Paper: 95/11; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. PG 17. PR not available. JE N22, E58, G21. KW Great Depression. Holiday. Bank Holiday. Reconstruction Finance. Gold Standard.
AB The banking crisis of 1933, which forced a national holiday closing the entire U.S. financial system, is often blamed on either publication of the names of banks borrowing from the Reconstruction Finance Corporation, or a speculative run on the gold-backed dollar, or both. Evidence presented here indicates that neither explanation is consistent with the data. The Michigan Bank holiday caused the run on the dollar, and set off a chain of bank runs which toppled the United States financial system.

Cabrales, Antonio

TI On the Persistence of Leadership or Leapfrogging in International Trade. AU Motta, Massimo; Thisse, Jacques-Francois; Cabrales, Antonio.

Calem, Paul S.

PD 1995. TI The Simple Analytics of Observed

Discrimination in Credit Markets. **AU** Calem, Paul S.; Stutzer, Michael. **AA** Calem: Board of Governors of the Federal Reserve System. Stutzer: University of Minnesota. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/7; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 49. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G21, J15, J18. **KW** Discrimination. Mortgages. Credit.

AB Controversial econometric studies of mortgage data show that mortgage loan applications by minorities are denied more frequently than applications by whites with similar observable default risk factors. But recent evidence indicates that minority borrowers also default more frequently than whites with similar observable risk. This paper presents a simple equilibrium model of discriminatory credit rationing and finds parametric restrictions consistent with both these empirical findings. But in this model, proposed anti-discrimination policies have surprising side effects. Thus, policy analysts accepting this empirical evidence should not expect to derive model-free conclusions about the effects of proposed policies.

PD April 1995. **TI** Consumer Behavior and the Stickiness of Credit Card Interest Rates. **AU** Calem, Paul S.; Mester, Loretta J. **AA** Calem: Board Of Governors of the Federal Reserve System. Mester: Federal Reserve Bank of Philadelphia and the University of Pennsylvania. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/10; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 44. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D83, G23. **KW** Credit Cards. Search. Adverse Selection. Moral Hazard.

AB Analyzing data from the 1989 Survey of Consumer Finances, we find credit card borrowing is inversely correlated with a household's willingness to comparison shop for loans and deposits. Households with larger balances have higher disutility of search, ceteris paribus. In addition, these households are more likely to be rejected or to be granted a lower-than-desired credit limit when applying for new credit, and so may find it difficult to switch from one card issuer to another. This partly explains the stickiness of card interest rates and why issuers enjoy above-average returns despite the industry's competitive structure.

PD July 1995. **TI** Mortgage Credit Availability in Low- and Moderate-Income Minority Neighborhoods: Are Information Externalities Critical? **AA** Board of Governors of the Federal Reserve System. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/16; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 23. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** J15, E51, D62, D82. **KW** Information. Banking. Mortgages.

AB This study conducts a cross-sectional analysis of U.S. metropolitan counties to inquire into the factors affecting white and minority mortgage loan approval rates during 1990-91. In particular, evidence is sought on whether minority loan applicants are denied credit more frequently than white applicants because of information externalities. Within each county, all predominantly minority, low-or moderate-income census tracts are grouped together, and all predominantly white, low- or moderate-income tracts are grouped together, and then regression equations are estimated across counties and tract groupings. Separate approval rate equations are estimated for conventional and federally insured (FHA or VA) home purchase loans. In addition, a regression equation for the percentage of applicants applying for federally insured loans is estimated. Both approval rate regressions indicate that across white tract groupings, the depth of the housing market (the number of sales of owner-occupied units during 1989) has a positive and statistically significant effect on the loan evaluations. However, this relationship appears not to hold across minority tract groupings.

Campa, Jose

PD June 1995. **TI** Investment, Pass-Through and Exchange Rates: A Cross-Country Comparison. **AU** Campa, Jose; Goldberg, Linda S. **AA** Campa: New York University. Goldberg: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5139; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** $5.00. **JE** E22, F31. **KW** Exchange Rates. Investment. Pass-Through.

AB Although large changes in real exchange rates have occurred during the past decades, the real implications of these movements remain an empirical question. Using detailed data from the United States, Canada, the United Kingdom, and Japan, we examine the implications of exchange rates for time series of sectoral investment. Both theoretically and empirically we show that investment responsiveness to exchange rates varies over time, positively in relation to sectoral reliance on export share and negatively with respect to imported inputs into production. The quantitative importance of each of these channels of exposure is a function of a set of exchange rate pass-through and demand elasticities. There exist important differences in investment endogeneity across high and low markup sectors, with investment in low markup sectors significantly more responsive to exchange rates. Unlike pass-through elasticities, which are viewed as industry-specific, investment endogeneity to exchange rates is a country-specific phenomenon.

Canova, Fabio

PD December 1994. **TI** International Consumption Risk Sharing. **AU** Canova, Fabio; O Ravn, Morten. **AA** Canova: Universitat Pompeu Fabra. O Ravn: University of Aarhus. **SR** Centre for Economic Policy Research, Discussion Paper: 1074; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 36. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D81, E32, F21. **KW** Consumption Insurance. International Investments. Capital Mobility. Long-Run Convergence.

AB This paper examines whether or not consumption risk sharing occurs in a panel of industrialized countries. We derive the international consumption insurance proposition in a simple theoretical model and show how it should be modified in more complicated models. We analyze empirically the implications of the proposition for pairs of countries over cycles of different length and find that aggregate domestic consumption is completely insured against idiosyncratic, real, demographic, fiscal and monetary shocks, but that it covaries with domestic variables over long or infinite cycles. Also, the cross equation restrictions imposed by the theory are, in general, rejected. The policy implications of the results are discussed.

PD January 1995. **TI** The Equity Premium and the Risk Free Rate: A Cross Country, Cross Maturity Examination. **AU** Canova, Fabio; De Nicolo, Gianni. **AA** Canova: Universitat Pompeu Fabra, Spain. De Nicolo: Brandeis University. **SR** Centre for Economic Policy Research, Discussion Paper: 1119; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 44. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** C15, E43, G12. **KW** Equity Premium. Risk Free Rate. Term Structure. Consumption CAPM. Model Evaluation.
AB This paper examines the relationship between the equity premium and the risk free rate at three different maturities using post-1973 data for a panel of seven OECD countries. We show the existence of subsample instabilities of some cross country differences and of inconsistencies with the expectations theory of the term structure. We perform simulations using a standard consumption based CAPM model and demonstrate that the basic features of Mehra and Prescott's (1985) puzzle remain, regardless of the time period, the investment maturity and the country considered. Modifications of the basic set-up are also considered.

PD February 1995. **TI** Household Production and International Business Cycles. **AU** Canova, Fabio; Ubide, Angel J. **AA** Canova: Universitat Pompeu Fabra, Spain. Ubide: European University Institute, Italy. **SR** Centre for Economic Policy Research, Discussion Paper: 1113; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 37. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** C68, E32, F41. **KW** Household Productions. International Business Cycles, Taste Shocks. Consumption Correlation.
AB This paper investigates the effects of introducing household production in an international real business cycle model. We show how a model driven by disturbances to the household production can account for some features of international cycles. A version of the model which considers shocks to both market and household technologies seems able to reproduce the main regularities of the data. Sensitivity analysis shows that the implications of the model are robust to alternative specifications of the stochastic processes for the disturbances and to variations of the parameters within a reasonable range.

Canzoneri, Matthew B.

PD January 1995. **TI** Real Interest Rates and Central Bank Operating Procedures. **AU** Canzoneri, Matthew B.; Dellas, Harris. **AA** Cansoneri: Georgetown University. Dellas: Katholieke Universiteit Leuven, Belgium. **SR** Centre for Economic Policy Research, Discussion Paper: 1099; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 29. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E43, E52, E58. **KW** Risk Premium. Real Interest Rates. Targeting Procedures. Price Stability.
AB In the years following the influential article of Poole (1970), many central banks reoriented their operating procedures to focus more on interest rates and less on monetary aggregates. The rapid restructuring of global financial markets was thought to have led to instability in standard monetary relationships, and Poole's basic insight suggested that a central bank would have better control of the price level if it targeted nominal interest rates instead of monetary aggregates. At the same time, there is a common perception that real interest rates have risen. This paper uses general equilibrium models to suggest that the switch in operating procedures may have caused a bias towards higher real interest rates and (rather perversely) less stable prices. Our model calibrations imply that US real interest rates might be 50 to 100 basis points lower, and prices might be 30 per cent to 40 per cent more stable, if the Fed switched its focus away from the nominal interest rate and targeted M1 instead. (These estimates assume a coefficient of relative risk aversion between 2.5 and 3.5.) Nominal income targeting would be a good compromise.

PD January 1995. **TI** Monetary Integration in Europe: Implications for Real Interest Rates, National Stock Markets and the Volatility of Prices and Exchange Rates. **AU** Canzoneri, Matthew B.; Dellas, Harris. **AA** Canzoneri: Georgetown University. Dellas: Katholieke Universiteit Leuven, Belgium. **SR** Centre for Economic Policy Research, Discussion Paper: 1100; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E52, E58, F32, F33, F36. **KW** Financial Integration. Real Interest Rates. Exchange Rates. Stock Markets. EMS.
AB Monetary arrangements in Europe vacillated wildly over the last decade, and they may be expected to continue to do so over the next. The literature on this chaotic process has focused on issues of credibility. Here, we focus instead on the longer-run implications of Europe's choice of monetary regime after the noise and confusion has abated. Changing the way transactions are made -- that is, which currencies are used to buy what goods, and which currencies are linked to one another by official intervention -- changes the way prices and exchange rates fluctuate in response to real and nominal shocks, and therefore their stability. Transaction patterns also determine the correlation between prices and consumption, which in turn affects real interest rates and the stock market via the risk premium. And finally, the changes in inflationary expectations that may accompany these regime switches can have an impact on the stock market via the seignorage tax. In this paper we calibrate a simple general equilibrium model to assess the impact on Germany, France, Italy and the United Kingdom of the process of monetary integration in Europe -- starting with a flexible rate regime, passing through a hard EMS, and ending in EMU, with periods of flexible rates along the way.

Carlin, Wendy

TI The Economics of Enterprise Restructuring in Central and Eastern Europe. **AU** Aghion, Philippe; Blanchard, Olivier Jean; Carlin, Wendy.

Carlino, Gerald

PD June 1995. **TI** The Differential Effects of Monetary Policy Shocks on Regional Economic Activity. **AU** Carlino, Gerald; DeFina, Robert H. **AA** Carlino: Federal Reserve Bank of Philadelphia. DeFina: Villanova University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/15; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 46. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** E52, R12. **KW** Monetary Policy. Regional Effects. Liquidity Effect. Credit.

AB This paper uses time-series techniques to examine whether monetary policy has similar effects across regions in the United States. The study examines quarterly data for the period 1958:1 to 1992:4 for the eight Bureau of Economic Analysis (BEA) regions. Impulse response functions and variance decompositions from an estimated structural vector autoregression reveal a core of regions--New England, Mideast, Plains, Southeast, and the Far West--that respond to monetary policy changes in ways that closely approximate the U.S. average response. Of the three non-core regions, one (Great Lakes) is noticeably more sensitive to monetary policy changes, and two (Southwest and the Rocky Mountain) regions are found to be much less sensitive. The size of regional response are found to depend positively on the percentile of a region's output attributable to manufacturing (regional interest rate channel), and positively on the percent of a region's firms that are small (regional credit channel).

Carrington, William J.

PD August 1994. **TI** The Alaskan Labor Market During the Pipeline Era. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 333; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 26. **PR** no charge. **JE** J22, L71. **KW** Labor Supply. Migration. Wages. Alaska.

AB Built between 1974 and 1977, the Trans-Alaska Pipeline(TAPS) was the largest privately-financed construction project in world history. The Alaskan labor market during the pipeline era provides an ideal opportunity to view labor market responses to a large, anticipated, and temporary shock to labor demand. The paper presents several theoretical models of market responses to temporary demand shocks, and then assesses the ability of each model to explain the Alaskan data. Among the findings are that Alaskan wages were very flexible, that labor supply was quite elastic on both the intensive (hours per worker) and extensive (number of workers) margins, and that even a major short-run demand shock need not have a long-run impact.

PD June 1995. **TI** Using Establishment Size to Measure the Impact of Title VII and Affirmative Action. **AU** Carrington, William J.; McCue, Kristin; Pierce, Brooks. **AA** Carrington: Johns Hopkins University. McCue and Pierce: Texas A&M University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 347; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 26. **PR** no charge. **JE** J15, J78. **KW** Affirmative Action. Title VII.

AB This paper starts with the observation that Title VII of the Civil Rights Act of 1964 and Affirmative Action apply more forcefully to large employers. We build a simple model that implies that if these policies were effective, then the relative share of black and female employment in large employers should have increased. Our empirical evidence shows that this is in fact what happened. Thus, our analysis supports the conclusion that antidiscrimination policy had an important effect on the labor market. As in earlier studies of affirmative action, however, the wage effects of the policies remain difficult to measure precisely.

Carroll, Christopher D.

PD February 1995. **TI** On the Concavity of the Consumption Function. **AU** Carroll, Christopher D.; Kimball, Miles S. **AA** Carroll: Board of Governors of the Federal Reserve System. Kimball: Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 345; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 11. **PR** no charge. **JE** D11, D91, E21. **KW** Consumption Function. Policy Rule. Uncertainty. Concavity. Stochastic Income.

AB Zeldes(1988), Carroll(1992; 1993), and others have shown that optimal consumption behavior for consumers facing income uncertainty can be remarkably different from the certainty-equivalent case. Carroll(1992; 1993) observes that many of the differences can be attributed to the concavity of the consumption function under uncertainty, but he does not describe the conditions under which the consumption function will be concave. We show that if labor income is stochastic, the consumption function will be concave for many commonly used utility functions, and if both labor income and capital income are stochastic, the consumption function is concave for an even broader group of utility functions.

PD June 1995. **TI** The Nature of Precautionary Wealth. **AU** Carroll, Christopher D.; Samwick, Andrew A. **AA** Carroll: Johns Hopkins University and Federal Reserve Board. Samwick: Dartmouth College and National Bureau of Economic Research. **SR** Johns Hopkins University, Department of Economics, Working Paper: 351; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 39. **PR** no charge. **JE** E21, E24, D91. **KW** Precautionary Saving. Life Cycle. Income Uncertainty. Household Wealth.

AB This paper use the Panel Study of Income Dynamics to provide some of the first direct evidence that wealth is systematically higher for consumers with greater income uncertainty. However, the apparent pattern of precautionary saving is not consistent with a standard parameterization of the life cycle model in which consumers are patient enough to begin saving for retirement early in life: wealth is estimated to be less sensitive to uncertainty in permanent income than implied by that model. Instead, our results suggest that over most of their working lifetime, consumers behave in accordance with the "buffer-stock" models of saving described in Carroll (1992) or Deaton(1991), in which consumers hold wealth principally to insulate consumption against near term fluctuations in income.

PD September 1995. **TI** Saving and Growth with Habit Formation. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N. **AA** Carroll: Johns Hopkins University. Overland and Weil: Brown University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 357; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 22. **PR** no charge. **JE** D91, E21, O41. **KW** Habit Formation. Relative Consumption. Endogenous Growth.

AB Standard growth models take the form of a representative consumer maximizing an intertemporally separable utility function. We explore the implications of one kind of nonseparability by allowing utility to depend on a comparison of consumption to a "habit stock" determined by past consumption. Our model is consistent with some empirical findings which are problematic for standard models. For example, Carroll and Weil (1994) find that aggregate saving rates increase after increases in the aggregate growth rate, even though growth rates are positively serially correlated; the standard model would predict a decline in saving as consumers spent part of their anticipated higher future income.

PD September 1995. **TI** Saving and Growth with Habit Formation. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N. **AA** Carroll: Federal Reserve Board. Overland and Weil: Brown University. **SR** Brown University, Department of Economics Working Paper: 95/25; Department of Economics, Brown University, Providence, RI 02912. **PG** 34. **PR** no charge. **JE** D91, E21, O41. **KW** Habit Formation. Relative Consumption. Endogenous Growth.
AB See Christopher D. Carroll, Jody Overland, and David N. Weil. "Saving and Growth with Habit Formation", John Hopkins University, Department of Economics, Working Paper: 357. September 1995.

Cecchetti, Stephen G.

PD June 1995. **TI** Inflation Indicators and Inflation Policy. **AA** Ohio State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5161; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** $5.00. **JE** E31, E52, E58. **KW** Monetary Policy. Inflation. Federal Funds Rate.
AB In recent years, central bankers throughout the world have advocated that monetary policy shift toward inflation targeting. Recent actions in the U.S. serve to highlight the desire of the Federal Reserve to keep inflation both low and stable, while downplaying the likely output and employment consequences. But control of inflation requires both that one be able to forecast the future path of the price level and that one have estimates of what impact policy changes have on that path. Unfortunately, inflation is very difficult to forecast at even very near horizons. This is true because the relationship of candidate inflation indicators to inflation is neither very strong nor very stable. Beyond this, the relationship between monetary policy instruments, such as the Federal Funds Rate, and inflation also varies substantially over time and cannot be estimated precisely. Construction of policy rules can take these difficulties into account. Several rules are examined, and they have the following interesting properties. First, since prices take time to respond to all types of impulses, the object of price stability implies raising the Federal Funds Rate immediately following a shock, rather than waiting for prices to rise before acting. Finally, comparison of the results of price level targeting with nominal income targeting suggests that the difficulties inherent in forecasting and controlling the former provide an argument for focusing on the latter.

Chadha, Bankim

PD November 1994. **TI** Inflation, Nominal Interest Rates and the Variability of Output. **AU** Chadha, Bankim; Tsiddon, Daniel. **AA** Chadha: International Monetary Fund. Tsiddon: The Hebrew University of Jerusalem. **SR** Centre for Economic Policy Research, Discussion Paper: 1068; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E12, E30, E41. **KW** Inflation. Output Variability. Stickiness. Interest Rates.
AB This paper examines the distribution of output around capacity when money demand is a non-linear function of the nominal interest rate such that nominal interest rates cannot become negative. When fluctuations in output result primarily from disturbances to the money market, the variance of output is shown to be an increasing function of the trend inflation rate. When they result from disturbances to the goods market, the variance of output is a decreasing function of the trend inflation rate. When both disturbances are significant, there exists, in general, a critical non-zero trend inflation rate that minimizes the variance of output.

PD January 1995. **TI** Unemployment, Investment and Sectoral Reallocation. **AU** Chadha, Bankim; Coricelli, Fabrizio. **AA** Chadha: International Monetary Fund . Coricelli: University of Siena, Italy. **SR** Centre for Economic Policy Research, Discussion Paper: 1110; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 29. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E22, E24, O11, O18, P50. **KW** Unemployment. Development. Restructuring. Investment.
AB This paper presents a model of development of an economy comprised of a rural-agricultural sector and an urban-industrial sector. The interaction of investment with unemployment creates a channel for potentially divergent long-run outcomes. If the urban-industrial capital stock falls short of a threshold level, the urban-industrial sector will not develop. If the capital stock is high enough, there is a unique path by which it will develop. Between these two extremes is a region of indeterminacy where expectations can play a pivotal role in determining the log-run outcome.

Chatterjee, Satyajit

PD 1995. **TI** Valuation Equilibria with Transactions Costs. **AU** Chatterjee, Satyajit; Corbae, Dean. **AA** Chatterjee: Federal Reserve Bank of Philadelphia. Corbae: University of Iowa. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/1; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 20. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D51, D23, C62. **KW** General Equilibrium. Transaction Costs. Valuation.
AB This paper studies economic environments with transactions technology. It shows that a simple redefinition of the commodity space allows these environments to be studied as instances of Debreu's valuation equilibrium. Thus, results from standard general equilibrium theory, namely, proof of existence of competitive equilibrium, and the First and Second Welfare Theorems are applicable. These results should provide a firm foundation for the quantitative study of resource allocation in the presence of transactions costs.

Chau, Nancy H. Y.

PD March 1994. **TI** Migrant Networks and the Pattern of Migration. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 332; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 9. **PR** no charge. **JE** D62, R23. **KW** Migration. Network Externalities.

AB In this paper, we examine the role of migrant network in determining patterns of outmigration. Conditions under which migration equilibrium may permit multiple steady states are identified. Our analysis discusses instances where migration generates its own demand and explains differences in migration propensities across potential sources of outmigration.

Chiu, W. Henry

PD October 1994. **TI** Unemployment Insurance: Endogenous Adverse Selection, Delayed-Start Policies and the Role of the Public Sector. **AU** Chiu, W. Henry; Karni, Edi. **AA** Chiu: University of Manchester. Karni: Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 334; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 19. **PR** no charge. **JE** H11, H41, J65, D62, D82. **KW** Unemployment Insurance. Adverse Selection. Moral Hazard.

AB In countries in which unemployment insurance exists it is provided by the public sector. In this paper we examine various types of private information as potential reasons for the failure of the private sector to provide unemployment insurance. In particular, we consider private information regarding employees' preferences and regarding employment prospects. We show that the first type of private information interacts with hidden actions to produce a new kind of adverse selection problem. We also show that the adverse selection problem caused by the second type of private information may be overcome by delayed-start policies. In view of these findings, we offer some reflections on the role of the public sector in providing unemployment insurance.

Cho, In-Koo

PD April 1995. **TI** Neural Network for Encoding and Adapting in Dynamic Economics. **AU** Cho, In-Koo; Sargent, Thomas J. **AA** Cho: University of Chicago and Brown University. Sargent: Stanford University and University of Chicago. **SR** Brown University, Department of Economics Working Paper: 95/28; Department of Economics, Brown University, Providence, RI 02912. **PG** 28. **PR** no charge. **JE** C72. **KW** Neural Network. Encoding. Adaptation. Complexity.

AB This paper is an introduction to using neural networks in economic dynamics. In the paper, several examples are studied that show neural networks to be fruitful sources of 'functional forms' for conveniently representing equilibria; for formulating ways of computing them; and for studying their stability. First, feedforward neural networks are described as approximators and are related to statisitical discriminant functions. Then, neural networks of varying complexity are shown to represent equilibria in two repeated games and one dynamic economic model.

PD September 1995. **TI** Complexity and Network in Repeated Games: Linear Strategies. **AU** Cho, In-Koo; Li, Hao. **AA** Brown University and University of Chicago. **SR** Brown University, Department of Economics Working Paper: 95/27; Department of Economics, Brown University, Providence, RI 02912. **PG** 27. **PR** no charge. **JE** C72. **KW** Network. Linear Threshold Rule. Semi-Perfect Equilibrium.

AB This paper, together with a companion paper (Cho and Li [1995]), examines the implications of complexity cost in implementing repeated game strategies through the networks with finitely many linear classifiers. As the first step of the investigation, we focus on networks with a single linear classifier, called linear strategies, where histories are discriminated according to a linear function of the empirical frequency of outcomes. It is assumed that each player must pay for computing the linear function in each period. We require that the pair of equilibrium networks be optimal along the path as well as at the beginning the game (Rubinstein [1986]). For any small computational cost, an individually rational payoff vector in a two-by-two game can be sustained by a pair of equilibrium networks if and only if it can be sustained by a Nash equilibrium of the component game or it is located on the two diagonals of the feasible payoff space of the component game.

PD September 1995. **TI** Perceptrons Play Repeated Games with Imperfect Monitoring. **AA** University of Chicago and Brown University. **SR** Brown University, Department of Economics Working Paper: 95/29; Department of Economics, Brown University, Providence, RI 02912. **PG** 33. **PR** no charge. **JE** C72. **KW** Repeated Games. Imperfect Monitoring. Perceptrons. Complexity.

AB This paper studies two person repeated games with imperfect monitoring without discounting through perceptrons, which are feedforward artificial neural networks. Under a fairly standard informational condition, we establish the folk theorem through perceptrons with at most 3 linear classifiers. The maximum number of linear classifiers is independent of the number of the actions in the component game or the target payoff vector. In particular, the perceptron dictates each player to monitor the opponent's action by computing the ordinary least square estimator of the opponent's expected payoff.

Clark, Bruce H.

PD July 1995. **TI** Perceiving Competitive Reactions: The Value of Accuracy (And Paranoia). **AU** Clark, Bruce H.; Montgomery, David B. **AA** Clark: Northeastern University. Montgomery: Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1335; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 13. **PR** no charge. **JE** C92, M31, C73, L13. **KW** Competition. Decision-Making. Strategy. Perception. Accuracy.

AB An assumption of much of the literature in marketing strategy is that a firm accurately knows the nature of its interaction with competitors. This study examines this assumption, and explores the relationship between firm performance and accuracy perception. Teams in the Markstrat 2 simulation game reported their reactions to competitors, while simultaneously indicating their perceptions of whether competitors had reacted to their decisions in the past. Team were in general inaccurate in identifying competitive reactions. Further, missing a competitive reaction (not perceiving a competitor's stated reaction) significantly reduced a team's performance. The data suggest that teams may benefit from being paranoid about their competitors; late in the game, the more competitive reactions a team perceived to its moves, the better the firm performed, regardless of accuracy.

Clinch, Greg

TI International Accounting Differences and Their Relations to Share Process: Evidence form U.K., Australian, and Canadian Firms. **AU** Barth, Mary E.; Clinch, Greg.

Cochrane, John H.

PD June 1995. **TI** Identifying The Output Effects of Monetary Policy. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5154; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** $5.00. **JE** C51, E32, E52. **KW** Monetary Policy. Output Response. VAR. Expectations.

AB What are the relative effects of anticipated vs. unanticipated monetary policy? I examine the effect of this identifying assumption on VAR estimates of the output response to money, assuming that anticipated monetary policy can have some effect on output results in much shorter and smaller output response estimates -- estimates closer to the predictions of most monetary models.

Coe, David T.

PD February 1995. **TI** North-South Research and Development Spillovers. **AU** Coe, David T.; Helpman, Elhanan; Hoffmaister, Alexander. **AA** Coe and Hoffmaister: International Monetary Fund. Helpman: Tel-Aviv University. **SR** Centre for Economic Policy Research, Discussion Paper: 1133; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** O31, O32, O41, O47. **KW** Research and Development. Trade. Productivity.

AB We examine the extent to which developing countries that do little, if any, research and development themselves benefit from research and development that is performed in the industrial countries. By trading with an industrial country that has large stocks of knowledge from its cumulative research and development activities, a developing country can boost its productivity by importing a larger variety of intermediate products and capital equipment embodying foreign knowledge, and by acquiring useful information that would other wise be costly to obtain. Our empirical results, which are based on observations over the 1971-90 period for 77 developing countries, suggest that research and development spillovers from the industrial countries in the North to the developing countries in the South are substantial.

TI R&D Spillovers and Global Growth. **AU** Bayoumi, Tamim A.; Coe, David T.; Helpman, Elhanan.

Cook, Philip J.

TI Habit and Heterogeneity in the Youthful Demand for Alcohol. **AU** Moore, Michael J.; Cook, Philip J.

Cooper, Russell

PD May 1995. **TI** Financial Intermediation and the Great Depression: A Multiple Equilibrium Interpretation. **AU** Cooper, Russell; Ejarque, Joao. **AA** Cooper: Boston University and National Bureau of Economic Research. Ejarque: Boston University. **SR** National Bureau of Economic Research, Working Paper: 5130; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $5.00. **JE** E32, E37, N12. **KW** Great Depression. Regime Shift. Sunspot Process. Financial Crisis.

AB This paper explores the behavior of the U.S. economy during the interwar period from the perspective of a model in which the existence of non-convexities in the intermediation process gives rise to a multiplicity of equilibria. The resulting indeterminacy is resolved through a sunspot process which leads to endogenous fluctuations in aggregate economic activity. From this perspective, the Depression period is represented as a regime shift associated with a financial crisis. Our model economy has properties which are broadly consistent with observations over the interwar period. Contrary to observation, the model predicts a negative correlation of consumption and investment as well as a highly volatile capital stock. Our model of financial crisis reproduces many aspects of the Great Depression, though the model predicts a much sharper fall in investment than is observed in the data. Modifications to our model (adding durable goods and a capacity utilization choice) do not overcome these deficiencies.

Copelman, Martina

PD September 1995. **TI** The Monetary Transmission Mechanism in Mexico. **AU** Copelman, Martina; Werner, Alejandro M. **AA** Copelman: Board of Governors of the Federal Reserve System. Werner: International Monetary Fund. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 521; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 31. **PR** no charge. **JE** E41, F51, O54. **KW** Monetary Transmission. Credit. Monetary Policy. Mexico. Credit View.

AB An important question in macroeconomics has been how the transmission mechanism of monetary policy works. In particular, the question of whether there exists a credit channel for the transmission of monetary policy has been one of the central themes in the discussion of the effectiveness of monetary policy. If this channel exists, then shocks to credit markets, particularly to bank loans, can have real effects. This paper presents new evidence on the credit hypothesis for the case of Mexico after 1984. We present a simple variant of the open economy IS-LM model which includes a credit channel. The model has the following empirical implications which are absent from models which do not include a credit channel. We show that changes in the expectations of devaluation, the desired cash/deposit ratio, and measures of financial deregulation, will have real effects because they change the quantity of credit available in the economy. We explore these implications of the model through standard VAR techniques and find that the evidence strongly supports the credit view. We find that the impact on economic activity of credit and nominal depreciation rate shocks is very significant.

Corbae, Dean

TI Valuation Equilibria with Transactions Costs. **AU** Chatterjee, Satyajit; Corbae, Dean.

Coricelli, Fabrizio

TI Unemployment, Investment and Sectoral Reallocation. **AU** Chadha, Bankim; Coricelli, Fabrizio.

Corsetti, Giancarlo

TI A Center-Periphery Model of Monetary Coordination and Exchange Rates Crises. **AU** Buiter, Willem H.; Corsetti, Giancarlo; Pesenti, Paolo A.

Crafts, Nicholas F. R.

PD January 1995. **TI** Europe's Golden Age: An Econometric Investigation of Changing Trend Rates of Growth.

AU Crafts, Nicholas F. R.; Mills, Terence C. AA Crafts: University of Warwick. Mills: University of Hull. SR Centre for Economic Policy Research, Discussion Paper: 1087; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 25. PR 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. JE C32, O47, O52. KW Economic Growth. Segmented Trend. Unit Root.

AB This paper examines growth in output per person in 17 OECD countries from the late nineteenth century to 1989 considering the possibility of several breaks in trend. In all cases the unit root hypothesis is rejected in favor of a segmented trend stationary alternative. 1951-73 is shown to be an epoch of exceptionally rapid economic growth in Western Europe and this seems to result both from catch-up and from reconstruction. With one exception, recent income levels in Western Europe are found to be higher than would have been expected on the basis of extrapolating the pre-1914 trend growth rate.

TI British Economic Growth Since 1945: Relative Economic Decline...and Renaissance? AU Bean, Charles; Crafts, Nicholas F. R.

PD January 1995. TI Post-War Growth: An Overview. AU Crafts, Nicholas F. R.; Toniolo, Gianni. AA Crafts: University of Warwick. Toniolo: Universita degli Studi di Venezia. SR Centre for Economic Policy Research, Discussion Paper: 1095; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 45. PR 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. JE N14, O47, O52. KW Economic Growth. Europe. Investment. Productivity Growth.

AB The paper comprises a thorough survey of the literature on growth in Western Europe since 1950. This experience is put in the context both of long-run historical trends and the ideas emanating from recent work in growth economics. The exceptional nature of the Golden Age (1950-73) is confirmed and given a historical interpretation. Catch-up growth is seen as central to this period but not to be a pure neoclassical phenomenon. It is argued that theory has run ahead of measurement and that future research will need to look much more carefully at proxies for human capital formation and at determinants of ex-ante returns on investment.

Croushore, Dean

TI Expectations and the Effects of Monetary Policy. AU Ball, Laurence M.; Croushore, Dean.

Currie, David

PD March 1995. TI Can Delegation Be Counterproductive? The Choice of "Conservative" Bankers in Open Economies. AU Currie, David; Levine, Paul; Pearlman, Joseph. AA Currie: London Business School. Pearlman: London Guildhall University. Levine: University of Surrey. SR Centre for Economic Policy Research, Discussion Paper: 1148; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 44. PR 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. JE E52, E58, F33. KW Open Economy. Monetary Policy. Conservative Bankers. Delegation Game.

AB This paper provides a comprehensive assessment of the open economy aspects of the "delegation game" in which the operation of monetary policy is delegated to independent and "conservative" central bankers with a greater dislike of inflation than the public. When all countries optimally and independently choose the conservatism of their bankers a highly inefficient Nash equilibrium can result. This inefficiency increases as the number of countries increases, the correlation of shocks increases, and if there is unemployment persistence. Delegation can be counterproductive in the sense that the non-cooperative equilibrium of the delegation game results in a lower welfare than that of the representative bankers game.

Cutler, David M.

PD June 1995. TI Are Ghettos Good or Bad? AU Cutler, David M.; Glaeser, Edward L. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5163; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 40. PR $5.00. JE J15, R12. KW Racial Segregation. Ghettos. Poverty.

AB Theory suggests that spatial separation of racial and ethnic groups can have both positive and negative effects on the economic performance of minorities. Racial segregation may be damaging because it curtails informational connections with the larger community or because concentrations of poverty deter human capital accumulation and encourage crime. Alternatively racial segregation might ensure that minorities have middle-class role models and thus promote good outcomes. We examine the effects of segregation on African-American outcomes in schooling, employment and single parenthood and find that African-Americans in more segregated areas do significantly worse, particularly if they live in central cities. We control for the endogeneity of location choice using instruments based on political factors, topographical features of cities, and residence before adulthood. Some, but never more than 40 percent of this effect, stems from lack of role models and large commuting times.

Dabalen, Andrew

TI A CGE Model for California Tax Policy Analysis: A Review of Literature. AU Berck, Peter; Dabalen, Andrew.

Dagan, Nir

PD March 1995. TI Feasible Implementation of Taxation Methods. AU Dagan, Nir; Serrano, Roberto; Volij, Oscar. AA Dagan: The Hebrew University of Jerusalem. Serrano and Volij: Brown University. SR Brown University, Department of Economics Working Paper: 95/14; Department of Economics, Brown University, Providence, RI 02912. PG 23. PR no charge. JE D31, D71. KW Implementation Theory. Taxation.

AB This paper studies the problem of implementation of taxation methods in one-commodity environments in which the taxable incomes of the two or more agents are not known to the planner. In this problem (unlike most work in implementation theory), the feasible set is unknown to the designer. We first show that feasibility out of equilibrium imposes that the mechanism depend on the environment. Next we present two game forms. In the first one, which requires complete information among the tax payers, each agent reports the incomes of all players to a central agency, and implementation of every taxation method is obtained in Nash, strong and coalition-proof equilibrium. In the second, informational requirements may be relaxed. One of the agents makes a tax proposal, the others bargain with him, and the services of a central agency are used only to solve disputes between pairs of agents. This game form implements a large class of consistent and monotone taxation methods in subgame perfect equilibrium. Neither mechanism employs the off- equilibrium devices used by the general theory. Departures from complete information are also discussed.

PD September 1995. **TI** Formation of Nations in a Welfare State Minded World. **AU** Dagan, Nir; Volij, Oscar. **AA** Dagan: Univeritat Pompeu Fabra. Volij: Brown University. **SR** Brown University, Department of Economics Working Paper: 95/26; Department of Economics, Brown University, Providence, RI 02912. **PG** 32. **PR** no charge. **JE** D31, H42, J68. **KW** Income Distribution. Nation Formation. Migration.
AB We model the endogenous formation of nations in a world economy where nations apply redistributive policies. We show that stronger distributive policies may lead to greater inequality in the world's distribution of income as a result of rich individuals tending to form their own nations when strong distributive policies are applied. By the same token, stable economic integration occurs only when redistributive policies are not too strong. We also show that when governments can choose not to intervene in the income distribution of their economies, the essentially unique equilibrium of the world economy is full economic integration with no intervention.

Dahan, Momi
PD July 1996. **TI** Fiscal Policy and Saving Under Distortionary Taxation. **AU** Dahan, Momi; Hercowitz, Zvi. **AA** Dahan: Bank of Israel. Hercowitz: Tel Aviv University and Bank of Israel. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 22/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 23. **PR** no charge. **JE** E13, H31. **KW** Income Tax. Saving. Fiscal Policy.
AB An empirical investigation of fiscal effects on saving is carried out with Israeli data which display large variability in both the saving rate and the fiscal variables. The framework is a small open-economy model with distortionary taxation. The theoretical analysis of the partial effect of each fiscal variable on the national saving rate takes into account the necessary adjustment in future taxes. The present model predicts, for example, that the income tax rate should have a negative effect on saving -- in contrast with the Keynesian view -- and transfer payments to the public, as well as interest payments on the public debt, should have positive effects -- in contrast with the Ricardian view -- under lump-sum taxation. The empirical results partially support the predictions regarding the income tax and interest payments. The consumption tax rate is found to have a positive effect on saving as predicted. The methodology consists of two steps. First, quantitative predictions are obtained via simulation, and then the simulated effects are compared with the estimated coefficients.

Daly, Mary C.
PD July 1995. **TI** Worker Adaptation and Employer Accommodation Following The Onset of a Health Impairment. **AU** Daly, Mary C.; Bound, John. **AA** Daly: Syracuse University. Bound: University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5169; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** $5.00. **JE** I12, J28. **KW** Health Limitations. Worker Adaptation. Employer Accommodation.
AB The responses of workers and their employers to the onset of work- limiting health impairments were investigated using data from the new "Health and Retirement Survey". The results indicate that many workers who suffer from health limitations are directly accommodated by their employers, and that those who do not receive direct accommodation frequently adapt to their limitations by altering their job demands or by changing jobs. These findings point to the potential for adjustments on both sides of the market: by employers -- in the form of job accommodation -- and by employees -- in the form of job change.

Daniel, Joseph I.
PD March 1995. **TI** Monopolistically Competitive Price and Waiting Time Dispersion. **AU** Daniel, Joseph I.; Mulligan, James G. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/01; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 32. **PR** not available. **JE** D43, L13. **KW** Oligopoly. Cournot Equilibrium. Waiting Time.
AB This paper presents a model of price and waiting-time dispersion among monopolistically-competitive firms that allows free entry and the endogenous determination of prices, waiting times, and market structure. Heterogeneous preferences over waiting times result in an asymmetric Cournot-Nash equilibrium with demand segmented by customer time values and firms differentiated by price and service time combinations. In both short- and long-run equilibrium, mass-market firms charge lower prices than smaller niche firms. Cournot equilibrium prices, waiting times, output rates, profits, and welfare are nearly identical to the socially optimal levels. Cournot competition results in somewhat more (less) product variety when cost per service unit is low (high) and demand density is high (low).

Davis, Steven J.
PD May 1995. **TI** Measuring Gross Worker and Job Flows. **AU** Davis, Steven J.; Haltiwanger, John. **AA** Davis: University of Chicago and National Bureau of Economic Research. Haltiwanger: University of Maryland and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5133; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** $5.00. **JE** C82, J21, J61, J62, J63. **KW** Job Flows. Worker Flows. Labor Market. Data Sets.
AB We combine information from several different studies and data sets to assemble a fuller, more accurate picture of job flows and worker flows in U.S. labor markets. Our picture characterizes the magnitudes of job and worker flows, the connections between them, their cyclical behavior, differences among identifiable groups of workers and employers, the spatial concentration of job flows, and other aspects of labor market dynamics. We also assess the relative strengths and weaknesses of the U.S. data sets that are currently available for measuring labor market flows, and we clarify the relationships among various measures of labor market flow activity that

appear in the literature. Finally, we discuss prospects for using administrative records maintained by U.S. government agencies to develop new longitudinal data sets that would permit timely, detailed and comprehensive measures of gross job and worker flows.

de Brouwer, Gordon

PD November 1995. **TI** Modelling Inflation in Australia. **AU** de Brouwer, Gordon; Ericsson, Neil R. **AA** de Brouwer: Australian National University. Ericsson: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 530; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 67. **PR** no charge. **JE** E31, O56. **KW** Australia. Cointegration. Inflation.
AB This paper develops an empirically constant, data-coherent, error correction model for inflation in Australia. The level of consumer prices is a mark-up over domestic and import costs, with adjustments for dynamics and relative aggregate demand. We address issues of cointegration, general to specific modelling, dynamic specification, model evaluation and testing, parameter constancy, and exogeneity. We also test this model against existing models of Australian prices: this model encompasses (but is not encompassed by) the existing models.

De Fraja, Gianni

PD December 1994. **TI** Entry, Pricing and Incentives: The Role of Regulatory Commitment. **AA** University of York. **SR** Centre for Economic Policy Research, Discussion Paper: 1078; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 37. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** L11, L51. **KW** Regulation. Entry. Commitment.
AB This paper studies the optimal regulatory policy in a market where entry may occur. The regulator regulates the incumbent, but not the entrant in the event of entry. We show that the effect of entry on prices and incentives for cost reduction depends on the extent of the regulator's commitment. If it is possible to commit to the chosen policy, then the market outcome following entry is less competitive than it would be without the possibility to commit; price is higher and incentives for cost reduction weaker.

PD December 1994. **TI** Competition, Regulation and Managerial Incentives. **AU** De Fraja, Gianni; Lossa, Elisabetta. **AA** University of York. **SR** Centre for Economic Policy Research, Discussion Paper: 1079; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 34. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** L11, L51. **KW** Regulation. Entry. Commitment.
AB This paper examines the effects of a competitive fringe on a regulated firm. Using Hart's (1983) model, we show that competition weakens the managerial incentives for cost reduction; when there is correlation between the cost levels of the firms in the industry, costs are higher in the regulated firm than when cost are independent. We also show that incentives are further weakened by an increase in the number of firms. Moreover, under analogous circumstances the regulated firm shows higher costs than private managerial firms. We end our paper by drawing a potentially important conclusion on the design of regulatory mechanisms. We show that there might be considerable gains (in terms of both lower prices and managerial incentives for cost reduction) if the regulatory target is set in terms of output, rather than price. In this case, the presence of competition determines a reduction in slack.

PD January 1995. **TI** Regulation and Access Pricing with Asymmetric Information. **AA** University of York. **SR** Centre for Economic Policy Research, Discussion Paper: 1122; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 17. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D42, L11, L12, L51. **KW** Regulation. Network. Access. Competition.
AB We study in this paper whether the price charged to a competitor for the use of an essential input produced in conditions of natural monopoly should reflect only considerations of relative efficiency between the various potential suppliers. In a model that captures the technological conditions operating in industries such as telephone, gas, and rail, where access to a distribution network is essential to the ability to compete, we show that this is not the case. Instead, the access price should be set pro-competitively; it may be socially optimal to award production to a firm less efficient than the owner of the network.

De Grauwe, Paul

PD December 1994. **TI** Exchange Rates in Search of Fundamental Variables. **AA** Katholieke Universiteit Leuven. **SR** Centre for Economic Policy Research, Discussion Paper: 1073; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F31, F41. **KW** Exchange Rates. Exchange Markets.
AB In this paper it is shown that relatively simple models are capable of generating exchange rate movements that, at least in the short run, are largely disconnected from their fundamental values. The essential ingredient of such models is the hypothesis that economic agents use different information sets. It is assumed that there are two classes of agents, fundamentalists and chartists. The former use the information contained in the model and a forecast of future fundamental variables. The latter forecast the future exchange rate based on past exchange rate movements. The interaction of these two classes of agents creates a non- linearity in the model and is responsible for the complex behavior of the exchange rate.

de Lima, Pedro J. F.

PD January 1996. **TI** Nonlinearities and Nonstationarities in Stock Returns. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 360; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 21. **PR** no charge. **JE** C12, C22. **KW** Nonlinearity. Nonstationarity. Conditional Heteroskedasticity.
AB This paper addresses the question of whether recent findings of nonlinearities have been contaminated by possible shifts in the distribution of the first differences of the logarithms of stock prices indexes. The paper develops a testing methodology that formally attempts to discriminate between the two types of rejections of the null of linearity. It is shown that structural shifts play an important role in the evolution of financial time series: linear processes with shifts in variance are able to replicate the behavior of the tests introduced in the

paper, whereas stationary ARCH-type filters show little consistency with the data. Moreover, it is shown that ARCH models fitted to data generated by a simple one-break linear process exhibit levels of persistence similar to the ones usually reported for high-frequency applications.

De Nicolo, Gianni

TI The Equity Premium and the Risk Free Rate: A Cross Country, Cross Maturity Examination. **AU** Canova, Fabio; De Nicolo, Gianni.

De Palma, Andre

TI Privatization and Efficiency in a Differentiated Industry. **AU** Anderson, Simon P.; De Palma, Andre; Thisse, Jacques-Francois.

Decressin, Jorg

PD December 1994. **TI** Regional Labour Market Dynamics in Europe. **AU** Decressin, Jorg; Fatas, Antonio. **AA** Decressin: International Monetary Fund. Fatas: INSEAD. **SR** Centre for Economic Policy Research, Discussion Paper: 1085; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 30. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F22, J60, R12. **KW** Regions. Labor Markets. European Integration.

AB The paper investigates regional labor markets dynamics in Europe and compares the results to those obtained for the United States. It analyzes to what extent regional employment dynamics are common to all regions in Europe and to all states in the United States. It finds that a higher proportion of movements in employment growth is common to all US states than to all EEC regions. Next, the paper studies the adjustment mechanisms that a typical region specific shock triggers. It shows that for Europe, for the first three years, most of the shock is absorbed by changes in the participation rate while, in the United States, it is immediately reflected in migration. Surprisingly, in both cases, the unemployment rate plays a small role, suggesting the presence of natural unemployment rates at the regional level.

DeFina, Robert H.

TI The Differential Effects of Monetary Policy Shocks on Regional Economic Activity. **AU** Carlino, Gerald; DeFina, Robert H.

PD November 1995. **TI** The Long-Run Variance of Output and Inflation Under Alternative Monetary Policy Rules. **AU** DeFina, Robert H.; Stark, Thomas C.; Taylor, Herbert E. **AA** DeFina: Villanova University. Stark and Taylor: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/25; 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** E31, E32, C32. **KW** Inflation. Stability. Growth.

AB This study empirically estimates the trade-off between inflation variance and real growth variance faced by the Fed under optimal and alternative policy rules using U.S. data covering the period 1959:1 to 1993:2. The results show that, outside a narrow band, the trade-off becomes quite steep, implying that the Fed has little room to trade off between its goals. These results are consistent with those of Taylor (1979) and Fuhrer (1994). The estimates also suggest that smoothing interest rates would produce a combination of real growth and inflation variability reasonably close to an efficient outcome and would dominate the variance outcomes under money growth targets. The choice between interest rate smoothing and nominal GDP growth targets, and between nominal GDP and money growth targets, each depends on policy makers' preferences about stability in inflation versus stability of real growth.

Dekle, Robert

PD January 1995. **TI** Saving-Investment Associations and Capital Mobility on the Evidence from Japanese Regional Data. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 496; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 25. **PR** no charge. **JE** F21, F32. **KW** Saving. Investment. Current Account.

AB We will examine the size of the Feldstein and Horioka (1980) "saving- retention coefficient" in a setting of near perfect capital mobility, Japanese regions. We first find that on total regional saving and investment rate data, inclusive of regional government saving and investment, the estimate of the coefficient is negative. This negative relationship in the total rates across Japanese regions appears to arise from the strong negative association in the government saving and investment rates. Second, on private regional investment and saving rate data, the "saving-retention coefficient" is insignificantly different from zero. This is evidence consistent with the Feldstein and Horioka hypothesis that in a financially integrated economy, the coefficient will be close to zero. Finally, we find that countries and regions differ in their saving and investment rate responses to demographics. This different response to demographics may be partly behind the divergence in the "saving-retention coefficient" reported in this paper and those found in cross-country regressions.

Dellas, Harris

TI Real Interest Rates and Central Bank Operating Procedures. **AU** Canzoneri, Matthew B.; Dellas, Harris.

TI Monetary Integration in Europe: Implications for Real Interest Rates, National Stock Markets and the Volatility of Prices and Exchange Rates. **AU** Canzoneri, Matthew B.; Dellas, Harris.

Den Haan, Wouter J.

PD March 1995. **TI** Inferences from Parametric and Non-Parametric Covariance Matrix Estimation Procedures. **AU** Den Haan, Wouter J.; Levin, Andrew T. **AA** Den Haan: University of California, San Diego. Levin: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 504; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 43. **PR** no charge. **JE** C12, C13, C51, C52. **KW** Autocorrelation. Heteroskedasticity. Hypothesis Tests. Generalized Method of Moments.

AB We propose a parametric spectral estimation procedure for constructing heteroskedasticity and autocorrelation consistent (HAC) covariance matrices. We establish the consistency of this procedure under very general conditions similar to those considered in previous research. We also perform Monte Carlo simulations to evaluate the performance of this procedure in drawing reliable inferences from linear regression estimates. These simulations indicate that the parametric estimator matches, and in some cases greatly exceeds, the performance of the prewhitened kernel estimator proposed by Andrews and Monahan (1992). These simulations also illustrate the inherent limitations of non- parametric HAC covariance matrix estimation procedures, and highlight the advantages of explicitly modeling the temporal properties of the error terms.

Detragiache, Enrica

PD November 1994. **TI** Externalities in Technology Diffusion, Growth & Trade. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 335; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 26. **PR** no charge. **JE** O11, F01, O33. **KW** Technology Diffusion. Growth. Trade.

AB Using an explicit model of technology adoption and diffusion, this paper studies the dynamics of a small open economy closing its technological gap with the rest of the world. Because diffusion is self- propagating, small differences in adoption costs may lead to large long run differences in technology and income levels across countries. As new technology spreads, the economy experiences transitional growth; the patterns of trade depend on the degree of diffusion both in the long run and during the transition. Infant industry protection can be welfare improving, while direct foreign investment and international labor migration can be immiserizing, because they have adverse effect on technology adoption.

Diba, Behzad T.

PD January 1995. **TI** Causality Implications of the Public-Finance Approach to Inflation and Seigniorage. **AU** Diba, Behzad T.; Martin, Philippe. **AA** Diba: Georgetown University. Martin: Graduate Institute of International Studies, Switzerland. **SR** Centre for Economic Policy Research, Discussion Paper: 1121; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 09. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E51, E52, E58, E61, E62. **KW** Seigniorage. Inflation. Public Finance. Granger Causality.

AB Recent empirical tests of dynamic optimal seigniorage models focus on their smoothing and log-run implications. The models also imply that the optimal policies are forward looking; that is seigniorage revenues depend on expected future government expenditures. We report causality tests of forward-looking policies for Germany, France, Italy, the United Kingdom and the United States.

Dickens, William T.

PD May 1995. **TI** Do Labor Rents Justify Strategic Trade and Industrial Policy? **AA** The Brookings Institution and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5137; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** $5.00. **JE** J24, J31, J41. **KW** Efficiency Wages. Productivity. Developed Economies.

AB Several efficiency wage theories of wage determination have the property that identical workers are more productive in high wage industries and that the promotion of employment in high wage industries can increase GDP (and some measures of welfare). I argue that while policies to favor high wage industries may increase productivity, the effects in developed economies are likely to be very small. This is mainly because the workers who fill the high wage vacancies will come from fairly high wage jobs.

Dixit, Avinash

PD November 1994. **TI** The Determinants of Success of Special Interests in Redistributive Politics. **AU** Dixit, Avinash; Londregan, John. **AA** Princeton University. **SR** Centre for Economic Policy Research, Discussion Paper: 1054; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D72, H32. **KW** Interest Groups. Redistribution. Swing Voters. Machine Politics.

AB We construct a locational model of majority voting when competing parties offer special favors to interest groups. Each group's membership is heterogeneous in its affinities for the two parties. Individuals face a trade-off between party affinity and their own transfer receipts. The model is sufficiently general to yield two often-discussed but competing theories as special cases. If the parties are equally effective in delivering transfers to any group, the outcome of the process conforms to the swing voter theory: both parties woo the politically-central groups most responsive to economic favors. If groups have party affiliations and each party is more effective in delivering favors to its own support group, we can get the machine politics outcome, where each party dispenses favors to its core support group. But in some circumstances the machine may find it advantageous to tax its core and use the proceeds to win the support of other voters.

PD November 1994. **TI** Redistribute Politics and Economic Efficiency. **AU** Dixit, Avinash; Londregan, John. **AA** Princeton University. **SR** Centre for Economic Policy Research, Discussion Paper: 1056; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D72, F13, H21, J24. **KW** Interest Groups. Redistribution. Occupation Choice. Efficiency.

AB The political process often compensates the losers from technical change or international competition in an economically inefficient way, namely by subsidizing or protecting declining industries instead of encouraging the movement of resources to other more productive uses. We find that a dynamic inconsistency in the game of redistributive politics contributes to this outcome. To achieve economically efficient outcomes, it is necessary that those making economically inefficient choices are not given offsetting transfers. But the political process distributed income on the basis of political characteristics, which are in general different from the economic characteristics that are rewarded by the market. We identify circumstances in which the inefficient choosers have desirable political characteristics, and therefore are immune from threats of having to face the economic consequences of their choices.

TI Common Agency and Coordination: General Theory and Application to Tax Policy. AU Grossman, Gene M.; Dixit, Avinash; Helpman, Elhanan.

Driscoll, John

PD October 1995. TI Spatial Correlations in Panel Data. AU Driscoll, John; Kraay, Aart. AA Driscoll: Brown University. Kraay: The World Bank. SR Brown University, Department of Economics Working Paper: 95/34; Department of Economics, Brown University, Providence, RI 02912. PG 29. PR no charge. JE C14, C23, C33. KW Spatial Correlation. Panel Data. Covariance Matrix. Heteroskedasticity. Autocorrelation.

AB In many panel data sets encountered in macroeconomics, international economics and finance, the residuals from different cross-sections are likely to be correlated with one another. Standard panel data techniques which rely on the assumption of independent cross sectional units for their asymptotic justification are inappropriate in the presence of such cross-sectional or "spatial" correlations. In this paper, we present conditions under which a simple extension of the non-parametric heteroskedasticity and autocorrelation consistent covariance matrix estimation techniques of Newey and West (1987) will yield estimates which are robust to very general forms of spatial and temporal dependence as the time dimension becomes large. Evidence from Monte Carlo simulations shows this technique to be superior to various common alternatives for a number of canonical cases.

Duffy, Niall

TI Fertility Control Early in Marriage in Ireland a Century Ago. AU Grada, Cormac O.; Duffy, Niall.

Dumas, Bernard

PD November 1994. TI Short- and Long-Term Hedging for the Corporation. AA HEC School of Management. SR Centre for Economic Policy Research, Discussion Paper: 1083; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 35. PR 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. JE F31, G31, G32, L10. KW Exchange Risk. Hedging. Corporations. International Trade. Floating Exchange Rate.

AB Exchange risk hedging in a static (i.e., one-period) setting is extremely straightforward. The variance-minimizing hedge of a particular future cash flow involves a forward contract equal but opposite in sign to the exposure of the cash flow. The exposure is the regression coefficient of the cash flow on the exchange rate. In a multi-period setting, the matter is much less straightforward. Information concerning a future cash flow evolves over time. For that reason, a hedge undertaken early on may have to be revised several times. These revisions themselves increase the level of risk. In this paper I explore the case for deliberately leaving a cash flow unhedged for some time, initiating a hedge at some appropriate time and thereafter, perhaps, leaving the hedge untouched until the cash flow is received or paid. The precise mathematical theory in support of this idea has yet to be developed.

Dumas, Chris

TI International Trade and the Internalization of Environmental Damages. AU Karp, Larry S.; Dumas, Chris; Koo, Bonwoo; Sacheti, Sandeep.

Eaton, Jonathan

PD May 1995. TI Sovereign Debt. AU Eaton, Jonathan; Fernandez, Raquel. AA Boston University and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5131; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR $5.00. JE F34, H63. KW Sovereign Debt. Debt Restructuring. Repayment.

AB We review the literature on sovereign debt. We organize our survey around three central questions: (1) Why do sovereign debtors ever repay their debts? (2) What burdens, in the form of distortions and inefficiencies, does sovereign debt impose? and (3) How might debt be restructured to reduce these burdens? In grappling with the first question, the literature has pointed to, and argued about, the roles of reputation, punishments, rewards and renegotiation. In addressing the second, the literature has asked whether sovereign debtors tend to borrow too much or too little, and how debt can distort the domestic economy. Answers to the third question include measures by creditors, by debtors, and by public institutions to reduce debt burdens.

Eberts, Randall W.

PD June 1995. TI Cyclical Versus Secular Movements in Employment Creation and Destruction. AU Eberts, Randall W.; Montgomery, Edward. AA Eberts: W.E. Upjohn Institute. Montgomery: University of Maryland and National Bureau of Economic Research. SR National Bureau of Economic Research, Working Paper: 5162; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 25. PR $5.00. JE E32, J63. KW Job Creation. Job Destruction. Output Shocks.

AB This paper offers an analysis of cyclical and secular patterns in job turnover using establishment-level data. We provide evidence from multiple data sets that show that the job turnover process is markedly different over time and across regions. Over time, we find that employment fluctuations are associated primarily with job destruction. Across regions, employment differences are associated primarily with job creation. Differences were found between the cyclical (within) and secular (across state) responses in job creation and destruction to output shocks. Movements in job creation and destruction were also found to be related to the types of human capital externalities or technological spillovers used to explain long-run differences in regional or national growth rates.

Eckstein, Zvi

TI A Neoclassical Interpretation of Inflation and Stabilization in Israel. AU Bental, Benjamin; Eckstein, Zvi.

Edison, Hali I.

PD August 1995. TI Alternative Approaches to Real Exchange Rates and Real Interest Rates: Three Up and Three Down. AU Edison, Hali I.; Melick, William R. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 518; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. PG 32. PR no charge.

JE C22, E31, F31. **KW** Exchange Rates. Interest Rates. Interest Rate Parity. Cointegration.
AB This paper examines the relationship between real exchange rates and real interest rates using three different approaches across four currencies and two horizons with 20 years of data. Each approach gives some encouragement that this relationship might hold, but each approach also encounters problems establishing the form or usefulness of the relationship. On balance, this paper contributes to the literature by finding more encouraging results than in earlier studies, but it still remains to be demonstrated that the real exchange rate-real interest rate relationship is the linchpin to explaining exchange rate movements.

Ehrenberg, Ronald G.

PD June 1995. **TI** Would Reducing Tenure Probabilities Increase Faculty Salaries? **AU** Ehrenberg, Ronald G.; Pieper, Paul J.; Willis, Rachel A. **AA** Ehrenberg: Cornell University and National Bureau of Economic Research. Pieper: University of Illinois. Willis: University of North Carolina. **SR** National Bureau of Economic Research, Working Paper: 5150; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** $5.00. **JE** J31, J32, J33. **KW** Tenure Probabilities. Wages. University Faculty. Economics Departments.
AB The simplest competitive labor market model asserts that if tenure is a desirable job characteristic for professors, they should be willing to pay for it by accepting lower salaries. Conversely, if an institution unilaterally reduces the probability that its assistant professors receive tenure, it will have to pay higher salaries to attract new faculty. Our paper tests this theory using data on salary offers accepted by new assistant professors at economics departments in the United States during the 1974-75 to 1980-81 period, along with data on the proportion of new Ph.Ds hired by each department between 1970 and 1980 that ultimately received tenure in the department or at a comparable or higher quality department. We find evidence that a tradeoff did exist. Equally important, departments that offer low tenure probabilities to assistant professors also paid higher salaries to their tenured faculty. We attribute this to their need to pay higher salaries to attract tenured faculty from the external market.

Eichenbaum, Martin

TI Capital Utilization and Returns to Scale. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio.

Eichengreen, Barry

PD November 1994. **TI** Speculative Attacks on Pegged Exchange Rates: An Empirical Exploration with Special Reference to the European Monetary System. **AU** Eichengreen, Barry; Rose, Andrew K.; Wyplosz, Charles. **AA** Eichengreen and Rose: University of California, Berkeley. Wyplosz: INSEAD. **SR** Centre for Economic Policy Research, Discussion Paper: 1060; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 49. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F31, F32, F36. **KW** Balance of Payments. Crisis. Speculative Attack. ERM.
AB This paper presents an empirical analysis of speculative attacks on pegged exchange rates in 22 countries between 1967 and 1992. We define speculative attacks or crises as large movements in exchange rates, interest rates, and international reserves. We develop stylized facts concerning the univariate behavior of a variety of macroeconomic variables, comparing crises with periods of tranquillity. For ERM observations, we cannot reject the null hypothesis that there are few significant differences in the behavior of key macroeconomic variables between crisis and non-crisis periods. This null hypothesis can be decisively rejected for non-ERM observations, however. Precisely the opposite pattern is evident in the behavior of actual realignments and changes in exchange rate regimes. We attempt to tie these findings to the theoretical literature on balance of payments crises.

PD November 1994. **TI** Is There a Safe Passage to EMU? Evidence On Capital Controls and a Proposal. **AU** Eichengreen, Barry; Rose, Andrew K.; Wyplosz, Charles. **AA** Eichengreen and Rose: University of California, Berkeley. Wyplosz: INSEAD. **SR** Centre for Economic Policy Research, Discussion Paper: 1061; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 41. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F31, F32, F36. **KW** Speculative Attacks. EMS. Exchange Rates. Exchange Rates Crisis.
AB This paper provides evidence on the effects of capital controls. We show that controls have been associated with significant differences in macroeconomic behavior, especially in monetary policy. While they have not prevented speculative attacks, they have provided the breathing space needed to organize orderly realignments. We also provide evidence on the channels through which speculative attacks operate, showing that bank lending to non-residents is a key transmission mechanism. We conclude with a discussion of measures that mimic some of the effects of controls as a way of easing the transition to European Monetary Union. Non-interest-bearing deposit requirements on lending to non-residents are proposed as a third-best route to monetary union.

Eissa, Nada

PD June 1995. **TI** Labor Supply Response to the Earned Income Tax Credit. **AU** Eissa, Nada; Liebman, Jeffrey B. **AA** Eissa: University of California, Berkeley and National Bureau of Economic Research. Liebman: Harvard University. **SR** National Bureau of Economic Research, Working Paper: 5158; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 42. **PR** $5.00. **JE** H21, H24, I38, J22. **KW** Tax Credit. Tax Reform. Labor Supply. Welfare.
AB In a series of major expansions starting in 1987, the earned income tax credit (EITC) has become a central part of the federal government's anti-poverty strategy. In this paper, we examine the impact of the Tax Reform Act of 1986 (TRA86), which included an expansion of the EITC, on labor force participation and hours of work. The expansion of the credit affected an easily identifiable group, single women with children, but is predicted to have had no effect on another group, single women without children. Other features of TRA86, such as the increase in the value of dependent exemptions and the large increase in the standard deduction for head of household filers, are predicted by economic theory to have reinforced the impact of the EITC on the relative labor supply outcomes of single women with and without children. We therefore compare the change in labor supply of single women with children to the change in labor supply of single

women without children. We find that between 1984-1986 and 1988-1989, single women with children increased their labor force participation by 1.4 percentage points (from a base of 73.1 percent) relative to single women without children. We explore a number of possible explanations for this finding and conclude that the 1987 expansion of the EITC and the other provisions of TRA86 are the most likely explanations. We find no effect of the EITC expansion on the hours of work of single women with children who were already in the labor force. Compared to other elements of the welfare system, the EITC appears to produce little distortion of work incentives.

Ejarque, Joao

TI Financial Intermediation and the Great Depression: A Multiple Equilibrium Interpretation. **AU** Cooper, Russell; Ejarque, Joao.

Elmendorf, Douglas W.

TI The Deficit Gamble. **AU** Ball, Laurence M.; Elmendorf, Douglas W.; Mankiw, N. Gregory.

Elston, Julie Ann

TI Does Firm Size Matter? Evidence on the Impacts of Liquidity Constraints on Firm Investment Behaviour in Germany. **AU** Audretsch, David B.; Elston, Julie Ann.

Elul, Ronel

PD July 1995. **TI** Financial Innovation, Precautionary Saving and the Riskless Interest Rate. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/19; Department of Economics, Brown University, Providence, RI 02912. **PG** 41. **PR** no charge. **JE** E21, G12. **KW** Financial Innovation. Incomplete Markets. Precautionary Saving.

AB We study the implication of the theory of precautionary saving for the effect of financial innovation on the riskless interest rate. This theory implies that when marginal utility is convex the presence of uninsured risk in the economy can lead to greater savings, and hence a lower equilibrium interest rate, than would otherwise be the case. This suggests, in particular, that financial innovation should tend to induce an increase in the interest rate. We assess this argument, somewhat critically, and provide examples and a theoretical result which suggest that it is not a general phenomenon.

Enev, Tihomir

PD June 1996. **TI** The Effect of Incomes Policies on Inflation in Bulgaria and Poland. **AU** Enev, Tihomir; Koford, Kenneth. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 96/7; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 27. **PR** not available. **JE** E64, E31, C32, P21. **KW** Bulgaria. Poland. Incomes Policy. Inflation.

AB This paper studies the effects of incomes policies on inflation in Bulgaria and Poland in 1990-1993. First, the actual policies, which were complex and changing, are examined. Then a time-series analysis includes a variety of determinants of inflation appropriate to economies in transition. The regressions find a fairly substantial inflation-reducing effect from the Bulgarian policy but no significant results from the Polish policy.

Engel, Charles

PD February 1995. **TI** How Wide is the Border? **AU** Engel, Charles; Rogers, John H. **AA** Engel: University of Washington and National Bureau of Economic Research. Rogers: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 498; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 36. **PR** no charge. **JE** E31, F31. **KW** Sticky Prices. Pricing to Market. Exchange Rates.

AB Failures of the law of one price explain much of the variation in real C.P.I. exchange rates. We use C.P.I. data for U.S. cities and Canadian cities for 14 categories of consumer prices to examine the nature of the deviations from the law of one price. The distance between cities explains a significant amount of the variation in the prices of similar goods in different cities. But, the variation of the price is much higher for two cities located in different countries than for two equidistant cities in the same country. By our most conservative measure, crossing the border adds as much to the volatility of prices as adding 2500 miles between cities.

PD January 1996. **TI** Regional Patterns in the Law of One Price: The Roles of Geography vs. Currencies. **AU** Engel, Charles; Rogers, John H. **AA** Engel: University of Washington. Rogers: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 533; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 44. **PR** no charge. **JE** F31. **KW** Prices. Geography. Currencies. One Price.

AB We find evidence that the law of one price (LOOP) holds more nearly for country pairs that are within geographic regions than for country pairs that are not. These findings are established using disaggregated consumer price data from 23 countries (including data from eight North American cities). We find that failures of LOOP are closely related to nominal exchange rate variability, suggesting a link to sticky nominal prices. We also find that distance can explain failures of LOOP, suggesting the failures arise from imperfect market integration. However, these two sources do not explain all of the failure of LOOP. We speculate that integrated marketing and distribution systems within regions cause LOOP to hold more nearly intraregionally. We present a formal model of marketing and distribution to illustrate this hypothesis.

Engle, Robert F.

PD May 1995. **TI** GARCH Gamma. **AU** Engle, Robert F.; Rosenberg, Joshua V. **AA** Engle: University of California, San Diego and National Bureau of Economic Research. Rosenberg: University of California, San Diego. **SR** National Bureau of Economic Research, Working Paper: 5128; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $5.00. **JE** C15, G12, G13. **KW** GARCH. Volatility. Black-Scholes. Options. Monte Carlo Methods.

AB This paper addresses the issue of hedging option positions when the underlying asset exhibits stochastic volatility. By parameterizing the volatility process as GARCH, and utilizing risk-neutral valuation, we estimate hedging parameters (delta and gamma) using Monte-Carlo simulation. We estimate hedging parameters for options on the Standard and Poor's 500 index, a bond futures index, a weighted foreign exchange rate index, and an oil futures index. We find that Black-Scholes and GARCH deltas are similar for all the options considered, while GARCH gammas are significantly higher than BS gammas for all options. For near the money options, GARCH gamma hedge ratios are higher than BS hedge ratios when hedging a long term option with a short term option. Away from the money, GARCH gamma hedge ratios are lower than BS.

Erard, Brian

TI The Relationship Between State and Federal Tax Audits.
AU Alm, James; Erard, Brian; Feinstein, Jonathan S.

Erickson, Timothy

PD April 1996. **TI** Two-Step GMM Estimation of the Errors-in-Variables Model Using High- Order Moments. **AU** Erickson, Timothy; Whited, Toni M. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 96/5; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 27. **PR** not available. **JE** C15, C14. **KW** Method of Moments. Errors-in-Variables.

AB We consider an errors-in-variables model where the measurement and equation errors are independent and have moments of every order, but otherwise are arbitrarily distributed. Resurrecting the idea of estimates bases on third and higher-order moments of the data, we present convenient GMM estimators that use all the information contained in any overidentifying set of moments. We present the correct asymptotic theory for two-step estimators based on residuals obtained by "partialling out" any perfectly measured regressors. Using high-order moments of residuals requires that we explicitly adjust the GMM covariance matrices to account for the fact that estimated residuals are used instead of true residuals defined by population projections. We determine the optimal GMM estimator based on estimated residuals, and provide consistent estimators of all covariance matrices. We illustrate our estimators by fitting simple empirical version of the q-theory of investment to a data set on 772 U.S. manufacturing firms. The likely reliability of the estimates is examined in a Monte Carlo study designed to simulate the features of our data set. GMM performs far better than naive least squares in the simulations, and attains optimum finite sample performance by using moments up to fifth order. Estimates from the investment data suggest that certain stylized facts about q-theory may be artifacts of neglected measurement error.

Ericsson, Neil R.

PD March 1995. **TI** The Lucas Critique in Practice: Theory Without Measurement. **AU** Ericsson, Neil R.; Irons, John S. **AA** Ericsson: Board of Governors of the Federal Reserve System. Irons: Massachusetts Institute of Technology. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 506; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 96. **PR** no charge. **JE** C52, D84, E13. **KW** Exogeneity. Expectations. Invariance. Lucas Critique. Regime Switches.

AB This paper investigates the empirical relevance of the Lucas critique. A database is constructed of all articles in the Social Science Citation Index that cite Lucas (1976). Those articles are characterized by the nature of the article, the context in which Lucas (1976) is cited, and the evidence presented on the Lucas critique. Virtually no evidence exists that empirically substantiates the Lucas critique. Empirical refutation of the Lucas critique by using tests of super exogeneity is illustrated with U.K. money demand. Numerous other studies similarly refute the Lucas critique for various empirical macro- economic relations.

TI Modelling Inflation in Australia. **AU** de Brouwer, Gordon; Ericsson, Neil R.

Fatas, Antonio

TI Regional Labour Market Dynamics in Europe. **AU** Decressin, Jorg; Fatas, Antonio.

Faust, Jon

TI Options, Sunspots, and the Creation of Uncertainty. **AU** Bowman, David; Faust, Jon.

PD July 1995. **TI** Block Distributed Methods for Solving Multi-Country Econometric Models. **AU** Faust, Jon; Tryon, Ralph. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 516; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 17. **PR** no charge. **JE** C53, C63, E17. **KW** Macroeconometric Model. Distributed Processing. Newton's Method. Jacobi's Method.

AB This paper examines variations on a baseline Fair-Taylor algorithm used to solve multi-country, rational expectations models. One notable feature of these variations is the ability to exploit small-scale distributed processing using a network of workstations or PCs. Using four processors to solve MX-4 (152 endogenous variables), the largest speedup factor relative to Fair-Taylor is 59; for RE-7 (978 endogenous variables) the maximum speedup factor is 12.

Feenberg, Daniel

TI The Taxation of Two Earner Families. **AU** Feldstein, Martin; Feenberg, Daniel.

Feenstra, Robert C.

PD May 1995. **TI** Foreign Investment, Outsourcing and Relative Wages. **AU** Feenstra, Robert C.; Hanson, Gordon H. **AA** Feenstra: University of California, Davis and National Bureau of Economic Research. Hanson: University of Texas and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5121; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** $5.00. **JE** F23, F41, J31. **KW** Wages. International Trade. Relative Prices. Production Outsourcing. Labor Skills.

AB In this paper we examine the reduction in the relative employment and wages of unskilled workers in the U.S. during the 1980s. We argue that a contributing factor to this decline was rising imports reflecting the outsourcing of production activities. In a theoretical model, we show that any increase in the Southern capital stock relative to that of the North, or neutral technological progress in the South, will increase the relative wage of skilled workers in "both" countries due to a shift in production activities to the South. We confirm that this change in relative prices occurred for the U.S. and other industrialized countries relative to their trading partners. We also estimate that 15-33 percent of the increase in the relative wage of nonproduction (or skilled) workers in the U.S. during the 1980s is explained by rising imports.

PD May 1995. **TI** Foreign Direct Investment and Relative Wages: Evidence from Mexico's Maquiladoras. **AU** Feenstra, Robert C.; Hanson, Gordon H. **AA** Feenstra: University of California, Davis and National Bureau of Economic Research. Hanson: University of Texas and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5122; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** $5.00. **JE** F21, F23, J31. **KW** Wage Inequality. Outsourcing. Multinational Firms. Labor Skills. Foreign Investment.

AB In this paper, we examine the increase in the relative wages of skilled workers in Mexico during the 1980s. We argue that rising wage inequality in Mexico is linked to capital inflows from abroad. The effect of these capital inflows, which correspond to an increase in outsourcing by multinationals from the United States and other Northern countries, is to shift production in Mexico towards relatively skill- intensive goods thereby increasing the relative demand for skilled labor. We study the impact of foreign direct investment (FDI) on the share of skilled labor in total wages in Mexico using state-level data on two-digit industries from the Industrial Census for the period 1975 to 1988. We measure the state-level growth in FDI using data on the regional activities of foreign-owned assembly plants. We find that growth in FDI is positively correlated with the relative demand for skilled labor. In the regions where FDI has been most concentrated, growth in FDI can account for over 50 percent of the increase in the skilled labor share of total wages that occurred during the late 1980s.

Feinstein, Jonathan S.

TI The Relationship Between State and Federal Tax Audits. **AU** Alm, James; Erard, Brian; Feinstein, Jonathan S.

Feldman, Allan M.

PD September 1995. **TI** Buying Time: A Model of the Dollar Value of Extra Years of Life. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/31; Department of Economics, Brown University, Providence, RI 02912. **PG** 33. **PR** no charge. **JE** D11, D61, D91. **KW** Value of Life. Medical Care. Buying Time.

AB The purpose of this paper is to develop a simple value of life model in which a rational individual decides how much to spend to increase his lifespan. This paper is about "buying time." In contrast to the standard value of life model, the model of this paper has no uncertainty. The story here is not about risk of death, it is about length of life. The standard willingness-to-pay-to-avoid risk model may relate well to real world quandries about how much to spend to reduce the likelihood of, say, automobile accidents, which are highly uncertain events. The model of this paper also relates well to real questions about how much to spend on medical care to prolong the lives of patients who can be kept alive, but who cannot be cured. Death is certain, but if we spend more it will be delayed. We can buy time.

PD January 1996. **TI** The Value of Life Revisited. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 96/2; Department of Economics, Brown University, Providence, RI 02912. **PG** 31. **PR** no charge. **JE** D11, D61, D91. **KW** Value of Life. Willingness to Pay. Broome Paradox.

AB This paper re-examines the standard willingness-to-pay value of life model of Jones-Lee and others. A consumer decides on allocating his income between consumption, life insurance, and precaution -- which affects his probability of survival in the one future period. The innovation of the paper is to assume a simple logarithmic utility function, a simple form for the survival probability function, and to solve analytically for various measure of the value of life. I show that for plausible parameter magnitudes, the various willingness-to-pay measures differ by many orders of magnitude. Moreover, the standard marginal willingness-to-pay measure has some strikingly bad features, including a strong negative connection with altruism. I conclude by suggesting that the standard probabilistic model of the value of life ought to be replaced by a certainty model.

Feldstein, Martin

PD June 1995. **TI** The Taxation of Two Earner Families. **AU** Feldstein, Martin; Feenberg, Daniel. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5155; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 55. **PR** $5.00. **JE** H21, H24, H31. **KW** Taxation. Dual Incomes. Labor Supply.

AB The present paper examines the efficiency and revenue effects of several alternative tax treatments of two earner families using estimates of the compensated elasticities of the labor supply of married women based on the experience with the 1986 tax rate reductions. The analysis of alternative options is based on the NBER TAXSIM model which has been modified to incorporate separate estimates of the earnings of husbands and wives. The marginal tax rates explicitly incorporate the Social Security payroll taxes net of the present actuarial value of future retirement benefits. Three general conclusions emerge from analyzing the simulations of the various options presented in this paper. First, the existing high marginal tax rates on married women cause substantial deadweight losses that can be reduced by alternative tax rules that lower their marginal tax rates. Second, the behavioral responses to the lower marginal tax rates induce additional tax payments that offset large fractions of the "static" revenue losses. Third, there are substantial differences in cost-effectiveness among these options, i.e., in the revenue cost per dollar of reduced deadweight loss. Several of the options are sufficiently cost-effective that they could probably be combined with other ways of raising revenue to produce a net reduction in the deadweight loss of the tax system as a whole. We are aware, however, that the current framework is very restrictive in three important ways. First, it ignores the response of the primary earner in the couple to any change in tax rates on spousal income. Second, it defines the labor supply response very narrowly in terms of participation and hours, excluding such important dimensions of labor supply as choice of occupation and of particular job, effort, location, travel requirements, risk bearing, assumption of responsibility, etc. More generally, taxes affect not only the labor supply of men and women but also change taxable income through changes in excluded income (fringe benefits, etc.) and in taxpayer deductions. These changes in taxable income are the key variable for influencing tax revenue and the deadweight loss of alternative tax rules. We plan to extend the current work to merge the evidence on the effects of taxes on the hours and participation of married women with the more general evidence on the sensitivity of taxable income to marginal tax rates.

Fenn, George W.

PD December 1995. **TI** The Economics of the Private Equity Market. **AU** Fenn, George W.; Liang, Nellie; Prowse, Stephen. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System: 168; Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 63. **PR** no charge. **JE** G10, G20. **KW** Equity Market. Intermediaries. Investors. Equity Returns.

AB This study examines the economic foundations of the private equity market, analyzes the market's development and current role in corporate finance, and describes the market's institutional structure. It examines the reasons for the market's explosive growth over the past fifteen years and highlights the main characteristics of that growth. And it describes the important issuers, intermediaries, investors, and agents in the market and their interactions with each other. Drawing on data from trade journals, the study also estimates the market's size. Finally, it provides data on returns to private equity investors and analyzes the major secular and cyclical influences on returns.

Fernald, John G.

TI Aggregate Productivity and the Productivity of Aggregate. **AU** Basu, Susanto; Fernald, John G.

Fernandez, Linda

PD March 1995. **TI** Wetlands Mitigation Banks: A Developer's Investment Problem. **AU** Fernandez, Linda; Karp, Larry S. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 748; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 44. **PR** $11.00 Domestic; $22.00 International Surface Rate. **JE** Q25, Q24. **KW** Wetlands Mitigation. Banks. Stochastic Control. Option Value. Developer's Investments.

AB We study a land developer's decision to invest in a wetlands mitigation bank. The state at which it is optimal to "cash in" the investment in return for restoration credits increases with uncertainty. We calibrate and numerically solve a stochastic control model which describes the developer's investment problem. We study the effect of the parameters of the model on the investment trajectory and the optimal stopping state. A subsidy increases the option value of the investment and the stopping state. A small decrease in the variance of the state dynamics decreases the option value of investment and the stopping state.

Fernandez, Raquel

TI Sovereign Debt. **AU** Eaton, Jonathan; Fernandez, Raquel.

Fershman, Chaim

PD July 1996. **TI** Social Rewards, Externalities and Stable Preferences. **AU** Fershman, Chaim; Weiss, Yoram. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 17/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 25. **PR** no charge. **JE** C73, D62, D11. **KW** Evolution. Status. Externalities.

AB This paper examines the role of social rewards as a corrective mechanism for activities which generate externalities. The focus of this paper is the circumstances under which social rewards provide effective and feasible incentive mechanism that may replace laws and regulations. In particular, social mechanism is effective only in a society in which individuals care about their standing in society. Thus, as part of our analysis of the effectiveness of social mechanisms we address the question: "why should a selfish individual care about what other people think about him?". The purpose of this paper is to characterized the circumstances in which evolution would lead to the survival of socially minded individuals, even though relative fitness is determined only by economic payoff. The paper identifies an interesting asymmetry. It is possible to use social mechanism to induce individuals to increase activities which generates positive externalities while it is impossible to induce them to curtail activities which cause negative externalities.

Fershtman, C.

PD October 1995. **TI** Social Rewards, Externalities and Stable Preferences. **AU** Fershtman, C.; Weiss, Yoram. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 32/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 16. **PR** no charge. **JE** H41, D62. **KW** Evolution. Status. Externalities.

AB The paper analyzes the role of social rewards, such as status, esteem and prestige, in resolving problems of externalities. It is shown that social rewards can be helpful for positive externalities, but are ineffective as a remedy for negative externalities. The result is derived in an evolutionary model for preferences, where agents may or may not care about what others think about them. Contempt for those who cause negative externalities is insufficient because those who care about what others think about them. Contempt for those who cause negative externalities is insufficient because those who care about status will be replaced by others who do not.

Fisher, Anthony C.

TI Valuation and Management of Tropical Forests: Implications of Uncertainty and Irreversibility. **AU** Albers, Heidi; Fisher, Anthony C.; Hanemann, W. Michael.

PD February 1996. **TI** A Model of Optimal Water Reserves Under Climate Change Uncertainty. **AU** Fisher, Anthony C.; Rubio, Santiago J. **AA** Fisher: University of California, Berkeley. Rubio: University of Valencia. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 776; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 41. **PR** $10.25 Domestic; $20.50 International Surface Rate. **JE** Q25, D81, D84. **KW** Water Reserves. Climate Change. Uncertainty. Risk. Water Supply.

AB In this paper we study the determination of optimal water reserves in a region, taking into account that the supply of the resource, the flow into the reserve, is uncertain, that building the reserve is costly, and that the commercial development of water resources may entail also environmental costs. We find that water reserves in the long run are positively related to increases in uncertainty, and that, for the case of costly reversibility of investment in reserves, a range of inaction for investment appears, and the stability of reserves with respect to changes in variance increases.

Fishman, Arthur

PD May 1995. **TI** Imperfectly Informative Equilibria for Signaling Games. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 17/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 17. **PR** no charge. **JE** D83, D73. **KW** Signaling. Pooling. Endogenous Information.

AB I analyze the equilibria of signaling games in which initially uninformed players may choose to become informed from an external source at a cost. It is shown that the lower this cost, the greater the extent to which the informed player's actions reveal its private information and the more the outcome resembles the symmetric information equilibrium.

PD May 1995. **TI** A Theory of Price Inertia. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 19/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 21. **PR** no charge. **JE** D82, D83, E31. **KW** Price Inertia. Search. Asymmetric Information. Inflation.

AB I present a theory of price inertia in a market characterized by dual informational frictions. At the firm specific level, buyers must invest in costly search to learn the price of any seller. At the aggregate level, there is imperfect information about inflation. Thus, knowledge of a particular seller's nominal price only imperfectly conveys its real price. However, buyers can resolve aggregate uncertainty in advance of trade by acquiring additional information from an external source at a small cost. In equilibrium, buyers in fact do become informed. Thus, all market participants are well informed in advance of trade. Nevertheless the equilibrium price of the search good is unresponsive to inflation.

Flanders, M. June

PD May 1995. **TI** Plus Ca Change...Plus C'est (Presque) La Meme Chose - A Review of Barry Eichengreen's Golden Fetters. **AA** Tel-Aviv University. **SR** Tel Aviv Sackler Institute of Economic Studies Working Paper: 12/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 24. **PR** no charge. **JE** F33, F42, N12, N14. **KW** Foreign Exchange. Gold Standard. Great Depression. Interwar Crisis. Policy Coordination.

AB This paper reviews Eichengreen's book and argues that coordination in the past was less important than he considers it, and in the present and future less possible than he suggests. It argues also that the 'golden fetters' of the interwar years may have been endogenously-imposed constraints on policy, the result, not the cause of the restrictive policies engaged in by a number of countries.

Flood, Robert P.

PD December 1994. **TI** Fixes: Of the Forward Discount Puzzle. **AU** Flood, Robert P.; Rose, Andrew K. **AA** Flood: International Monetary Fund. Rose: University of California, Berkeley. **SR** Centre for Economic Policy Research, Discussion Paper: 1090; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 11. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F31. **KW** Uncovered Interest Parity. Exchange Rate. Floating. EMS. Peso Problem.

AB Regressions of ex-post changes in floating exchange rates on appropriate interest differentials typically imply that the high interest rate currency tends to appreciate -- the forward discount puzzle. Using data from the European Monetary System we find that a large part of the forward discount puzzle vanishes for regimes of fixed exchange rates. That is, deviations from uncovered interest parity appear to vary in a way that is dependent upon the exchange rate regime. By using the many EMS realignments we are also able to quantify the peso problem.

Foster, E. Michael

TI The Dynamics of Non-Marital Childbearing: Life-Cycle and Cohort Estimates. **AU** Hoffman, Saul D.; Foster, E. Michael.

Francois, Joseph F.

PD November 1994. **TI** The Uruguay Round: A Global General Equilibrium Assessment. **AU** Francois, Joseph F.; McDonald, Bradley; Nordstrom, Hakan. **AA** General Agreement on Tariffs and Trade. **SR** Centre for Economic Policy Research, Discussion Paper: 1067; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 44. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D58, F10, F12. **KW** GATT. Uruguay Round. Liberalization. MFA. Agricultural Trade.

AB In this paper we provide an economic assessment of the Uruguay Round agreements on tariffs, textiles and clothing, and agriculture, highlighting scale economies, imperfect competition, and dynamic linkages between trade, incomes, and investment. We present estimates of the welfare effects of the individual agreements and their overall impact on different regions in the world. We also provide a decomposition of estimates with respect to various assumptions about model structure. The inclusion of imperfect competition, scale economies, and capital accumulation effects proves to be important, not least for developing countries.

PD December 1994. **TI** Labour Force Growth, Trade, and Employment. **AA** General Agreement on Tariffs and Trade. **SR** Centre for Economic Policy Research, Discussion Paper: 1069; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, J11, J21. **KW** Trade. Demographics. Employment. Modeling.

AB This paper examines the implications of labor force growth in one region for wages, employment, and production patterns in other regions. These issues are first explored in a stylized dual model incorporating features of both standard factor-based trade models and models of two- way trade and returns to specialization. Sufficient conditions for positive trade linkages between labor force growth in one region and real wage and employment erosion in another are derived. These conditions are then examined in the context of non-OECD labor force growth, through a multi-region, multi-sector numerical model of the world economy.

Frank, Jeff

TI Coverage by Incremental Scales. **AU** Booth, Alison L.; Frank, Jeff.

Frankel, David M.

PD July 1995. **TI** A Simple Model of Creative Bargaining. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 22/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 35. **PR** no charge. **JE** C78, D11. **KW** Bargaining. Creativity. Hold Up. Patent Races.

AB Rubinstein's alternating offers bargaining model is modified to study the creative process in bargaining. The pie to be divided is initially small. Before proposing, a player chooses how much creative effort to devote to looking for an idea that would enlarge the pie. Such an idea, once revealed, can be used by either player in a proposal. This leads to a hold up problem in which creativity is inefficiently low and players stop bargaining too soon. A scheme of property rights eliminates this problem. Whenever a player reports a new idea, with fixed probability r she receives an exclusive right to use the idea in her proposals. With probability 1-r, either player can use the idea. There exists a unique r, strictly less than one, that gives a unique, socially optimal subgame perfect equilibrium.

PD August 1996. **TI** The (Retail) Price of Inequality. **AA** Tel Aviv University and Bank of Israel. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 23/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 11. **PR** no charge. **JE** H71, H24, L81. **KW** Retail Markets. Retail Prices. State Income Taxes. Local Income Distribution.

AB A panel study reveals that an increase in pretax income equality leads to substantially lower retail prices. Prices also fall if the income tax on high income families is raised. One explanation is that equality makes consumer demand more elastic. This would imply that progressive taxation helps reduce the distortions that would come from imperfect competition in retail markets.

Frankel, Jeffrey A.

PD February 1995. **TI** A Panel Project on Purchasing Power Parity: Mean Reversion Within and Between Countries. **AU** Frankel, Jeffrey A.; Rose, Andrew K. **AA** Frankel: Institute for International Economics. Rose: University of California, Berkeley. **SR** Centre for Economic Policy Research, Discussion Paper: 1128; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 18. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F31, F47. **KW** Cross Section. Time Series. Exchange Rate. Inflation. PPP.

AB Previous time series studies have shown evidence of mean-reversion in real exchange rates. Deviations from purchasing power parity (PPP) appear to have half-lives of approximately four years. The long samples required for statistical significance are unavailable for most currencies, however, and may be inappropriate because of regime changes. In this study, we re-examine deviations from PPP using a panel of 150 countries and 45 annual observations. Our panel shows strong evidence of mean-reversion that is similar to that from long time series. PPP deviations are eroded at a rate of approximately 15 per cent annually (i.e., their half-life is around four years). Such findings can be masked in time series data, but they are relatively easy to find in cross-sections.

PD June 1995. **TI** Liberalized Portfolio Capital Inflows in Emerging Markets: Sterilization, Expectations, and the Incompleteness of Interest Rate Convergence. **AU** Frankel, Jeffrey A.; Okongwu, Chudozie. **AA** Frankel: University of California, Berkeley and National Bureau of Economic Research. Okongwu: University of California, Berkeley. **SR** National Bureau of Economic Research, Working Paper: 5156; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** $5.00. **JE** E43, F32, F36, F41. **KW** Interest Rates. Capital Inflows. Emerging Markets. Sterilization. Liberalization.

AB The paper examines interest rates in nine Latin American and East Asian countries during the period 1987-1994. The goal is to discover why interest rates have remained high, failing to converge to U.S. levels, despite capital market liberalization and a resurgence of portfolio capital inflows during the second half of this sample period. Related questions are whether portfolio capital flows are strong enough to equalize expected returns between these "emerging markets" and the U.S., and whether there is any scope left for the authorities to sterilize inflows. The conclusion of the study is that the largest single component of the gap in interest rates is expectations of depreciation of the local currencies against the dollar. Key to the analysis is the use of survey data on exchange rate forecasts by market participants. Indicative of integrated financial markets, we also find a big effect of U.S. interest rates on local interest rates and a highly significant degree of capital flow offset to monetary policy.

PD January 1996. **TI** Currency Crashes in Emerging Markets: An Empirical Treatment. **AU** Frankel, Jeffrey A.; Rose, Andrew K. **AA** Frankel: University of California, Berkeley. Rose: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 534; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 26. **PR** no charge. **JE** F32, F34. **KW** Exchange Rate. Debt. Currency.

AB We use a panel of annual data for over one hundred developing countries from 1971 through 1992 to characterize currency crashes. We define a currency crash as a large change of the nominal exchange rate that is also a substantial increase in the rate of change of the nominal depreciation. We examine the composition of the debt as well as its level, and a variety of other macroeconomic, external and foreign factors. Our factors are significantly related to crash incidence, especially output growth, the rate of change of domestic credit, and foreign interest rates. A low ratio of foreign direct investment to debt is consistently associated with a high likelihood of a crash.

Franz, Wolfgang

PD February 1995. **TI** Central and East European Labor Markets in Transition: Developments, Causes, and Cures. **AA** University of Konstanz, Germany. **SR** Centre for Economic Policy Research, Discussion Paper: 1132; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 58. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** J21, J31, J63, O52, P21. **KW** Labor Market. Employment. Unemployment. Wages. Transformation

Countries.
AB The main questions addressed in this paper are: First, how did labor markets in the Visegrad countries react to the breakdown of a command economy and the transformation to a market economy? Second, which way ahead is likely, or to put it differently, what should be done now to improve conditions in the labor market in these countries? A comprehensive survey of labor market developments in each country under consideration is offered at some length. Special emphasis is then put on the dynamics of employment and unemployment in order to identify key issues for the sources of the malfunctioning of these labor markets. The paper then looks at the wage formation process including institutional settings and income policies, active and passive labor market policies, and the structure of employment and output.

Freeman, Richard T.

PD September 1995. **TI** Targeting Inflation in the 1990s: Recent Challenges. **AU** Freeman, Richard T.; Willis, Jonathan L. **AA** Freeman: Board of Governors of the Federal Reserve System. Willis: Boston University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 525; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 38. **PR** no charge. **JE** E31, E52, E58. **KW** Inflation Targets. Credibility. Interest Rates. Monetary Policy.
AB This paper provides an evaluation of the effectiveness of inflation targeting in four industrial countries--New Zealand, Canada, the United Kingdom, and Sweden--focusing on the recent period of economic recovery. Evidence drawn from financial market data suggests that credibility of their inflation targeting regimes on balance has deteriorated during the past year and a half, as reflected mainly in sizable increases in medium- and long-term interest rates. Even after accounting for spillovers from increases in real rates globally (which appear to have been important) and cyclical effects, recent increases in long-term interest rates appear to be incompatible with the possibility that market expectations for inflation have remained on track with official objectives. The deterioration of credibility during this period, however, is considerably less than is implied by changes in nominal interest rates alone and varies considerably across targeting countries. Other evidence suggests that, although inflation targets have not had any detectable effect in altering the time-series characteristics of nominal interest rates (and, by implication, of inflation-expectations formation), there is mixed evidence that inflation targets may have helped stabilize inflation expectations and possibly lowered the inflation-risk premium in some countries.

Frenkel, David M.

PD February 1995. **TI** Search With Telephones and Differentiated Products. **AA** Tel-Aviv University. **SR** Tel Aviv Sackler Institute of Economic Studies Working Paper: 6/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 35. **PR** no charge. **JE** D83, L96, L15. **KW** Search. Telephones. Retail Markets. Product Differentiation. Agglomeration. Clustering.
AB Suppose a buyer can call ahead to ask for a price quote before visiting a firm, but must visit to discover her valuation because of product differentiation. If calling costs are low, some, but not all buyers call ahead. If calling costs are high, no buyers call ahead. Prices and profit margins are higher in the equilibrium with no callers, and buyer payoffs are lower. When some buyers call ahead, a decrease in visiting costs leads to higher prices and profit margins by reducing the proportion of buyers who call ahead. There is no such effect with homogenous products. This gives a new explanation for why clustering is greater among firms that sell differentiated products.

PD June 1995. **TI** A Pecuniary Reason for Income Mixing. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 20/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 18. **PR** no charge. **JE** R12, R21, R41. **KW** Integration. Segregation. Neighborhood Change. Retail Markets.
AB The literature on income stratification has identified many reasons to expect segregated neighborhoods and only a few potential explanations for integration. In contrast, empirical studies of U.S. cities have found a high degree of income mixing. Integration occurs when there is imperfect retail competition and transport costs vary with income. Households with high transport costs are willing to pay more in rent to live where retail prices are low, but retail prices are low only in areas that contain sufficiently many households with low transport costs. If households are patient, the barriers to moving are weak, and a neighborhood's location and physical characteristics do not strongly favor the status quo, then self-fulfilling expectations can lead to transitions between integrated and segregated neighborhoods and vice versa.

Friedberg, Rachel M.

PD January 1995. **TI** The Impact of Immigrants on Host Country Wages, Employment and Growth. **AU** Friedberg, Rachel M.; Hunt, Jennifer. **AA** Friedberg: Brown University and National Bureau of Economic Research. Hunt: Yale University and National Bureua of Economic Research. **SR** Brown University, Department of Economics Working Paper: 95/5; Department of Economics, Brown University, Providence, RI 02912. **PG** 39. **PR** no charge. **JE** E24, F22, J61. **KW** Immigration. Labor. Employment.
AB The popular belief that immigrants have a large adverse impact on the wages and employment opportunities of the native-born population of the receiving country is not supported by the empirical evidence. A 10 percent increase in the fraction of immigrants in the population reduces native wages by 0-1 percent. Even those natives who are the closest substitutes with immigrant labor do not suffer significantly as a result of increased immigration. There is no evidence of economically significant reductions in native employment. The impact on natives' per- capita income growth depends crucially on the immigrants' human capital levels.

Friedman, Benjamin M.

PD June 1995. **TI** Economic Implications of Changing Share Ownership. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5141; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** $5.00. **JE** G23, G24, G32. **KW** Institutional Investors. Equity Markets. Pension Funds. Mutual Funds.
AB Institutional investors, including especially pension funds and mutual funds, are steadily replacing individuals as owners of equity shares in the United States. Forty years ago,

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individuals investors owned 90 percent of all equity shares outstanding. Today the individually owned share is just 50 percent. The arguments and evidence surveyed in this paper suggest four ways in which this shift in share ownership could affect the functioning of the equity market: (1) Increasing institutional ownership could either enhance or impair the market's ability to provide equity financing for emerging growth companies. (2) Increasing institutional ownership, especially in the form of open-end mutual funds, has probably increased the market's volatility in the context of occasional large price movements. (3) The increasing prevalence of defined contribution (as opposed to defined benefit) pension plans, and especially of 401-k plans, has probably resulted in an increased market price of risk. (4) Increasing institutional ownership has facilitated a greater role for shareholders in the governance of U.S. corporate business, and correspondingly reduced the independence of corporate managements.

Froot, Kenneth A.

PD May 1995. **TI** The Law of One Price Over 700 Years. **AU** Froot, Kenneth A.; Kim, Michael; Rogoff, Kenneth. **AA** Froot: Harvard Business School and National Bureau of Economic Research. Rogoff: Princeton University and National Bureau of Economic Research. Kim: Pennsylvania State University. **SR** National Bureau of Economic Research, Working Paper: 5132; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 45. **PR** $5.00. **JE** E31, F31, F41. **KW** Exchange Rates. Law of One Price. PPP. Commodity Prices.

AB This paper examines annual commodity price data from England and Holland over a span of seven centuries. Our data set incorporates transactions prices on 8 commodities: barley, butter, cheese, eggs, oats, peas, silver, wheat as well as pound/shilling nominal exchange rates going back, in some cases, to 1273. We find that the volatility and persistence of deviations from the law of one price have been remarkably stable over time. LOP deviations are highly correlated across commodities (especially at annual horizons) and , for most pairwise comparisons in most centuries, at least as volatile as relative prices across different goods within the same country. Our analysis challenges the conventional view that the modern floating exchange rate experience is exceptional in terms of the behavior of relative (exchange-rate adjusted) prices across countries.

Gabbard, Susan

PD February 1996. **TI** All it Takes is Confidence: Job Search Confidence and Farm Workers' Wages, Benefits, and Working Conditions. **AU** Gabbard, Susan; Perloff, Jeffrey M. **AA** Gabbard: Aguirre International. Perloff: University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 777; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 34. **PR** $8.50 Domestic; $17.00 International Surface Rate. **JE** J43, J33, J32. **KW** Agricultural Labor. Agricultural Wages. Worker Benefits. Working Conditions.

AB According to search theory, workers who have higher reservation wages hold out for jobs with higher wages or other attractive attributes. Similarly, worker advocates and others argue that farm workers accept low wages and poor working conditions in agricultural employment because they have limited job opportunities outside of agriculture. We examine whether farm workers who have off-farm employment opportunities have better wages, benefits and working conditions in agriculture than other workers without these off-farm opportunities. The National Agricultural Worker's Survey (NAWS) asked workers whether they "could get a nonfarm job within a month." We estimate the effect of this confidence on wages, benefits, and working conditions.

Gagnon, Joseph E.

PD February 1996. **TI** Long Memory in Inflation Expectations: Evidence from International Financial Markets. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 538; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 23. **PR** no charge. **JE** E43, E44, F41. **KW** Fisher Effect. Interest Rates. Long-Term Bonds.

AB This study provides evidence that 10-year-ahead inflation expectations adapt very slowly to changes in realized inflation. This evidence derives primarily from yields on 10-year government bonds in a sample of OECD countries, including inflation-indexed bonds where they are available. The study examines both the cross-country and time-series behavior of interest rates and inflation rates. For the United States, additional evidence is provided from a survey of 10-year inflation expectations held by market participants. This study does not present a theoretical model of expectations formation. However, long memory of the type documented in this study would be implied by a model of multiple inflationary regimes in which agents base their probability distributions of future regimes on past inflationary experience.

Gale, Douglas

TI A Welfare Comparison of Intermediaries and Financial Markets in Germany and the U.S. **AU** Allen, Franklin; Gale, Douglas.

TI Financial Markets, Intermediaries, and Intertemporal Smoothing. **AU** Allen, Franklin; Gale, Douglas.

TI Universal Banking, Intertemporal Risk Smoothing, and European Financial Integration. **AU** Allen, Franklin; Gale, Douglas.

Gali, Jordi

PD November 1994. **TI** Endogenous Growth and Poverty Traps in a Cournotian Model. **AU** Gali, Jordi; Zilibotti, Fabrizio. **AA** Gali: New York University. Zilibotti: Universitat Pomoeu Fabra. **SR** Centre for Economic Policy Research, Discussion Paper: 1052; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 21. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** L13, O41. **KW** Endogenous Growth. Multiple Equilibria. Endogenous Mark-Ups.

AB We analyze the implications for the dynamics of capital accumulation of market power and endogenous demand elasticities in an environment in which the latter are affected by the number of competitors in each industry. In equilibrium, the interest rate increases as capital accumulates, even thought the marginal product of capital is constant. Under standard assumptions both a steady-state and a balanced growth path exist, and the possibility of multiple equilibrium paths (for given initial conditions) arises. It is argued that the latter feature matches several empirical observations.

Gallo, Giampiero M.

TI On the Evolution of Credibility and Flexible Exchange Rate Target Zones. **AU** Avesani, Renzo G.; Gallo, Giampiero M.

Galor, Oded

PD August 1995. **TI** Technological Progress, Mobility, and Economic Growth. **AU** Galor, Oded; Tsiddon, Daniel. **AA** Galor: Brown University and CEPR. Tsiddon: The Hebrew University and CEPR. **SR** Brown University, Department of Economics Working Paper: 95/32; Department of Economics, Brown University, Providence, RI 02912. **PG** 33. **PR** no charge. **JE** D31, J62. **KW** Earnings Mobility. Income Inequality. Human Capital. Growth. Overlapping-Generations.

AB This paper analyses the relationship between technological progress, the transmission of income inequality across generations, and economic growth. The analysis demonstrates that the interplay between technological progress and two components that determine individual's earnings -- parental human capital and individual's ability -- governs the evolutionary patterns of intergenerational earnings mobility, the pace of technological progress, and economic growth. In periods of major technological inventions the ability effect is the dominating factor. The decline in the relative importance of initial parental conditions (i.e., the driving force behind the persistence of inequality) enhances mobility and generates a larger concentration of high ability and thus a higher level of human capital in technologically advanced sectors, stimulating further technological progress and economic growth. In periods of technological innovations, however, when existing technologies become more accessible, the parental specific human effect is the dominating factor, mobility is diminished and inequality becomes more persistent. The reduction in the concentration of human capital in technologically advanced sectors diminishes the likelihood of major technological breakthroughs and slows down future economic growth. User friendliness, therefore, becomes unfriendly to future economic growth. Furthermore, the presence of social barriers for mobility, therefore, brings about economic impediments as well.

PD January 1996. **TI** Convergence?: Inferences from Theoretical Models. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 96/3; Department of Economics, Brown University, Providence, RI 02912. **PG** 20. **PR** no charge. **JE** O41. **KW** Conditional Convergence. Club Convergence. Growth.

AB This essay suggests that the convergence controversy may reflect, in part, differences in perception regarding the viable set of competing testable hypotheses generated by existing growth theories. It argues that in contrast to the prevailing wisdom, the traditional neoclassical growth paradigm generates the club convergence hypothesis as well as the conditional convergence hypothesis. Furthermore, the inclusion of empirically significant variables such as human capital, income distribution, and fertility in conventional growth models, along with capital markets imperfections, externalities, and non-convexities, strengthens the viability of club convergence as a competing hypothesis with conditional convergence.

PD May 1996. **TI** Technological Progress, Mobility and Economic Growth. **AU** Galor, Oded; Tsiddon, Daniel. **AA** Galor: Brown University, Hebrew University and CEPR. Tsiddon: Tel Aviv University and CEPR. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 13/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 31. **PR** no charge. **JE** O41, D31, J62. **KW** Earnings Mobility. Income Distribution. Inequality. Human Capital. Growth.

AB See Oded Galor and Daniel Tsiddon. "Technological Progress, Mobility and Economic Growth. Brown University, Department of Economics Working Paper: 95/32, August 1995.

Gandal, Neil

PD January 1995. **TI** Adoptions and Orphans in the Early Microcomputer Market. **AU** Gandal, Neil; Greenstein, Shane M.; Salant, David. **AA** Gandal: Tel Aviv University. Greenstein: University of Illinois. Salant: GTE Laboratories. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 2/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 26. **PR** no charge. **JE** L86, O33. **KW** Technology. Adoption. Microcomputer Industry.

AB In this paper we develop a model with (1) differentiated consumers, (2) endogenous adoption times, (3) technical uncertainty, and (4) alternative technologies sponsored by competing vendors. We identify conditions under which orphaning arises endogenously in a framework of dynamic competition. We then use the model to examine the development of the micro-computer market in the early 1980s, when the orphaning of a widely-adopted operating system occurred. We find that the data characterizing this event are consistent with our theoretical framework.

Gerlach, Stefan

PD November 1994. **TI** Contagious Speculative Attacks. **AU** Gerlach, Stefan; Smets, Frank. **AA** Bank for International Settlements. **SR** Centre for Economic Policy Research, Discussion Paper: 1055; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 21. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F31, F41. **KW** Speculative Attacks. Exchange Rate.

AB During the European exchange market turmoil in 1992-3 it was evident that speculative attacks tended to spread across currencies. Using a two-country version of the model developed by Flood and Garber (1984), we show how a speculative attack against one currency may accelerate the warranted collapse of a second parity. More important, even if the parity of the second currency is viable in the absence of a collapse of the first one, it might be subjected to a speculative attack if the reserves available to defend the parity are small.

Gertler, Mark

TI Inside The Black Box: The Credit Channel of Monetary Policy Transmission. **AU** Bernanke, Ben S.; Gertler, Mark.

Ghosal, Vivek

PD June 1995. **TI** Evidence on Nominal Wage Rigidity from a Panel of U.S. Manufacturing Industries. **AU** Ghosal, Vivek; Loungani, Prakash. **AA** Ghosal: Miami University.

Loungani: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 512; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 26. **PR** no charge. **JE** E24, E32, J31. **KW** Wage Rigidity. Indexation. Profit-Sharing.

AB Using annual data for 450 manufacturing industries over the periods 1958 to 1989, we establish the following stylized facts on the response of industry nominal wage growth to aggregate and industry influences: 1) We find support for the canonical wage contracts model outlined in Blanchard and Fischer (1989). The elasticity of response of nominal wage growth to expected inflation is 0.7. The elasticity of nominal wage growth with respect to changes in unexpected inflation is 0.1. 2) These elasticity estimates are robust to splitting the sample along various dimensions: level of unionization, durability of the product, and industry contract length. The elasticity of nominal wage growth to expected inflation ranges from 0.6 to 0.8; the elasticity with respect to unexpected inflation is between 0.1 and 0.2. 3) We find support for the multi-sector wage indexation models of Duca and VanHoose (1991) and others. The profit-sharing elasticity (the response of industry wage growth to industry profit growth) is positive, as hypothesized in these models. The instrumental variable estimates of the profit-sharing elasticity range from 0.1 to 0.3.

PD August 1995. **TI** Product Market Competition and the Impact of Price Uncertainty on Investment: Some Evidence from U.S. Manufacturing Industries. **AU** Ghosal, Vivek; Loungani, Prakash. **AA** Ghosal: Miami University. Loungani: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 517; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 17. **PR** no charge. **JE** E22, L16. **KW** Uncertainty. Investment. Irreversibility. Market Structure.

AB We estimate the impact of price uncertainty on investment using a panel of U.S. manufacturing industries. When we pool the data for all industries, uncertainty has no impact on current investment. However, this pooled estimate conceals an interesting difference across industries. For industries with a high degree of product market competition, the estimated impact is negative, reasonably large, and significantly different from zero. For relatively non-competitive industries, the impact is always small and not significantly different from zero. The finding of a negative relationship between investment and price uncertainty in competitive industries is broadly consistent with the predictions of models that incorporate irreversibility of capital investment.

Glaeser, Edward L.

TI Are Ghettos Good or Bad? **AU** Cutler, David M.; Glaeser, Edward L.

Glazer, Rashi

TI Context Effects in Managerial Decision Making by Groups and Individuals. **AU** Simonson, Itamar; Glazer, Rashi.

Goetz, Renan U.

PD May 1995. **TI** Diversification and Sustainable Agricultural Production. **AA** University of California, Berkeley and Swiss Federal Institute of Technology, Zurich, Switzerland. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 749; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 30. **PR** $7.50 Domestic; $15.00 International Surface Rate. **JE** Q28, Q13. **KW** Diversification. Agricultural Production. Sustainable Agriculture. Soil Erosion. Dynamic Model.

AB A dynamic economic model of soil erosion is presented where the choice of crops, each one associated with distinct erosion rates, allows the farmer to control soil losses. The results show that it is predominately optimal to approach the steady state equilibrium most rapidly by the cultivation of a single crop. At the steady state, however, a mix of crops is cultivated supporting the argument that diversification, as a prerequisite for sustainable agricultural production, is a necessary condition for long run profit maximizing behavior of the farmer. Myopic behavior of the farmer favors the cultivation of a single crop throughout the planning horizon irrespectively whether the farmer owns or leases the land. Decretion of the soil stock may occur if the land market is not efficient, if the price of a high erosion crop increases or if the social discount rate raises at the beginning of the planning horizon. At the steady state, however, an increase in the price of a low erosion crop may decrease the soil stock if the initiated intensification of production has a stronger negative effect on the soil stock than does the positive effect of an increase in the share of this crop in the crop mix.

Golan, Amos

PD April 1995. **TI** Estimating the Size Distribution of Firms Using Government Summary Statistics. **AU** Golan, Amos; Judge, George; Perloff, Jeffrey M. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 696R; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 23. **PR** $5.75 Domestic; $11.50 International Surface Rate. **JE** C13, L11. **KW** Size Distribution. Government Statistics. Concentration Measures. Entropy Approach.

AB Using a maximum entropy technique, we estimate the market shares of each firm in an industry using the available government summary statistics such as the four-firm concentration ratio (C4) and the Herfindahl-Hirschmann Index (HHI). We show that our technique is very effective in estimating the distribution of market shares in 20 industries. Our results provide support for the recent practice of using HHI rather than C4 as the key explanatory variable in many market power studies, if only one measure is to be used.

Golan, Elise Hardy

PD June 1995. **TI** Environmental Distortions and Welfare Consequences in a Social Accounting Framework. **AU** Golan, Elise Hardy; Adelman, Irma; Vogel, Stephen. **AA** Golan: University of Haifa. Adelman: University of California, Berkeley. Vogel: Economic Research Service, USDA. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 751; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 96. **PR** $24.00

Domestic; $48.00 International Surface Rate. **JE** D61, D62, O13. **KW** Environmental Externalities. Welfare Economics. Social Accounting.

AB The objective of this paper is to provide a framework for explicitly examining the impact that environmental externalities have on the level and distribution of income, production, and ultimately, welfare. The analysis will consider the distributional impact of environmental distortions on economic activity and welfare within the current economy and between the current economy and the future economy. The analysis proposes to evaluate the impact that environmental externalities have on welfare using changes in the levels of consumer and producer surpluses which accrue to different activities and agents in both the current and future economies.

Goldberg, Linda S.

TI Investment, Pass-Through and Exchange Rates: A Cross-Country Comparison. **AU** Campa, Jose; Goldberg, Linda S.

Goldstein, Morris

TI Do Credit Markets Discipline Sovereign Borrowers? Evidence from US States. **AU** Bayoumi, Tamim A.; Goldstein, Morris; Woglom, Geoffrey.

Gorton, Gary

PD March 1995. **TI** Banks And Derivatives. **AU** Gorton, Gary; Rosen, Richard. **AA** Rosen: University of Pennsylvania. Gorton: University of Pennsylvania, National Bureau of Economic Research and Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/12; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 59. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D84, G13, E43. **KW** Derivatives. Banking. Risk. Uncertainty. Swap Contracts.

AB In the last 10 to 15 years financial derivatives securities have become an important, and controversial, product for commercial banks. The controversy concerns whether the size, complexity, and risks associated with these securities, the difficulties with accurately reporting timely information concerning the value of firms' derivative positions, and the concentration of activity in a small number of firms has substantially increased the risk of collapse of the world baking system. Despite the widespread attention to derivatives, there has been little systematic analysis. We estimate market values and interest-rate sensitivities of interest-rate swap positions of U.S. commercial banks to empirically address the question of whether swap contracts have increased or decreased systemic risk in the U.S. banking system. We find that the banking system as a whole faces little net interest-rate risk from swap portfolios.

Gotlibovski, M.

TI Immigration, Search and Loss of Skill. **AU** Weiss, Yoram; Gotlibovski, M.

Gottschalk, Peter

TI Trends in the Autocovariance Structure of Earnings in the U.S.: 1969- 1987. **AU** Moffitt, Robert A.; Gottschalk, Peter.

Goulder, Lawrence H.

TI Costs of Environmentally Motivated Taxes in the Presence of Other Taxes: General Equilibrium Analyses. **AU** Bovenberg, A. Lans; Goulder, Lawrence H.

Gozalo, Pedro L.

PD December 1994. **TI** Nonparametric Bootstrap Analysis with Applications to Engel Demand Curves. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/7; Department of Economics, Brown University, Providence, RI 02912. **PG** 39. **PR** no charge. **JE** C14, C52, D12. **KW** Bootstrap. Engel Curves. Misspecification Tests. Nonparametric Methods.

AB A new bootstrap proposal, labeled smooth conditional moment (SCM) bootstrap, is introduced for independent but not necessarily identically distributed data, where the classical bootstrap procedure fails. The procedure is shown to encompass the iid and wild bootstrap procedures as special cases. The SCM bootstrap is applied to the construction of confidence intervals for nonparametric regression estimates, and of critical values for consistent nonparametric test statistics. In both cases, the bootstrap approximations to the small samples properties are usually far superior to these provided by the first-order asymptotic approximations. These results are applied to two issues of demand analysis: the importance of household demographic variables on expenditures behavior, and testing of some widely used parametric specifications used to incorporate demographic effects into demand systems. Nonparametric methods prove to be an excellent medium for the analysis of demographic effects using expenditure data. For example, we find that the coefficients of equivalence scales depend not only on household composition, but also on the level of income and the age of the reference person, questioning some of the assumptions used to construct some popular parametric equivalence scales. The nonparametric mispecification tests employed have the advantage over parametric tests of not being influenced by the choice of functional form made for our model.

PD May 1995. **TI** Nonparametric Specification Testing with Square Root of n-Local Power and Bootstrap Critical Values. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/21; Department of Economics, Brown University, Providence, RI 02912. **PG** 35. **PR** no charge. **JE** C14, C21, C52. **KW** *Bootstrap. Specification Tests. Nonparametric Tests.*

AB The paper introduces an extension of Gozalo's (1993) consistent specification testing framework which has the special property of being consistent against a large class of local alternatives converging at parametric one over the square root of n rates to the null. Furthermore, the test does not require under or over-smoothing as many nonparametric tests in the literature. A new bootstrap method, labeled smooth conditional moment (SCM) bootstrap, recently proposed by Gozalo (1994) for independent but not necessarily identically distributed data, is applied to the construction of critical values for consistent nonparametric test statistics. A Monte Carlo simulation is used to assess the performance of the test and of the bootstrap approximation in small samples. The bootstrap critical values are usually far superior to those provided by the first-order asymptotic approximations.

TI A Nonparametric Test of Conditional Independence. **AU** Linton, Oliver; Gozalo, Pedro L.

PD December 1995. **TI** Using Parametric Information in Nonparametric Regression. **AU** Gozalo, Pedro L.; Linton, Oliver. **AA** Gozalo: Brown University. Linton: Yale University. **SR** Brown University, Department of Economics Working Paper: 95/40; Department of Economics, Brown University, Providence, RI 02912. **PG** 53. **PR** no charge. **JE** C40. C52. **KW** Binary Choice. Kernel. Nonparametric Regression. Parametric Regression.

AB We introduce a new nonparametric regression estimator that uses prior information on regression shape in the form of a parametric model. In effect, we nonparametrically encompass the parametric model. We obtain estimates of the regression function and its derivatives along with local parameter estimates that can be interpreted from within the parametric model. We establish the uniform consistency and derive the asymptotic distribution of the local parameter estimates and of the corresponding regression and derivative estimates. For estimating the regression function our method has superior performance to the usual kernel estimators at or near the parametric model. It is particularly well motivated for binary data using the probit or logit parametric model as a base. We include an application to the Horowitz (1993) transport choice dataset.

Grada, Cormac O.

PD January 1995. **TI** Fertility Control Early in Marriage in Ireland a Century Ago. **AU** Grada, Cormac O.; Duffy, Niall. **AA** University College Dublin. **SR** Centre for Economic Policy Research, Discussion Paper: 1109; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 17. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** J11, J12, J13, N33. **KW** Marriage. Marital Fertility. Family Planning. Ireland.

AB Data were extracted from the 1911 Irish manuscript census to study the regional variation in the extent and character of family limitation strategies in Ireland a century ago. Regression analysis of the data shows evidence of spacing in both urban and rural Ireland. Further analysis of the so-called replacement problem also produces results consistent with spacing.

Gray, Stephen F.

TI Targets Zones and Exchange Rates: An Empirical Investigation. **AU** Bekaert, Geert; Gray, Stephen F.

Greenstein, Shane M.

TI Adoptions and Orphans in the Early Microcomputer Market. **AU** Gandal, Neil; Greenstein, Shane M.; Salant, David.

TI How Much Better is Bigger, Faster & Cheaper? Buyer Benefits from Innovation in Mainframe Computers in the 1980s. **AU** Brown, Kenneth; Greenstein, Shane M.

Grosfeld, Irena

PD November 1994. **TI** Financial System in Transition: Is there a Case for a Bank Based System? **AA** DELTA. **SR** Centre for Economic Policy Research, Discussion Paper: 1062; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 33. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** G10, G21, P34, P50. **KW** Financial Systems. Information. Corporate Control. Transition. Banks.

AB This paper looks at empirical evidence and economic theory in order to find some guidelines for building the institutions of a financial system. It argues that in the countries in transition, priority should be given to stimulating information generation about investment opportunities, and to ensuring substantial external evaluation of companies' potential. The actual evolution of financial systems in Central and East European countries shows, however, that banks are playing an increasingly important role, and that very close links are developing between the banking and the industrial sectors. If banks are to become not only privileged creditors, but also shareholders of firms, the information needed for efficient restructuring may become the victim of excessive commitment.

PD March 1996. **TI** Defensive and Strategic Restructuring in Central European Enterprises. **AU** Grosfeld, Irena; Roland, Gerard. **AA** Grosfeld: DELTA, ENS. Roland: ECARE. **SR** Centre for Economic Policy Research, Discussion Paper: 1135; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 56. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** G24, G32, L21, P34, P52. **KW** Restructuring. Corporate Governance. Central Europe. Privatization. Managerial Incentives.

AB This paper interprets the existing evidence on enterprise restructuring in Poland, Hungary and the Czech Republic. Despite differences in restructuring policies, the pattern of observed restructuring appears similar in the three countries. Contrary to initial expectations, managers of SOEs have engaged in significant adjustment activities. We argue that such behavior is due to dramatic changes in the market environment of firms and in their perceived incentive structure. It appears, however, that the adjustment measures have mainly had a defensive character restricted to labor-shedding and downsizing activities. Strategic restructuring, involving thoughtful business projects and modernization investments, is much more limited. We argue that progress on strategic restructuring requires both progress in ownership transformation and in financial reform. A crucial role could be played by intermediaries playing the role of venture capital funds.

Grossman, Gene M.

PD February 1995. **TI** Technology and Trade. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Centre for Economic Policy Research, Discussion Paper: 1134; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 73. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F10, O33. **KW** Trade. Technology. Growth. Learning by Doing.

AB We review the literature on the links between technology and international trade. The older literature assumed exogenous technologies and focused on their effects on the structure of foreign trade and on welfare. Recently much of the effort has been on explaining technological change. As a result, we also describe the effects of foreign trade on technological change. We deal with technological change that results from learning by doing and from innovation, and we describe the relationship between each one of these forms of change in technology with international trade. Apart from integrating much of the recent literature on leaning by doing, we show that there are important common themes and results in these two strands of the literature.

PD October 1995. **TI** Rent Dissipation, Free Riding, and Trade Technology. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 31/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 10. **PR** no charge. **JE** F13, H41, D62, D72. **KW** Rent Dissipation. Free Riding. Trade Policy.
AB We argue that the threat of rent dissipation does not foil the potential political ambitions of expanding industries. An expanding industry will lobby for supportive policies in political equilibrium even if all participants expect only a normal rate of return at the end of the day, provided that early and late entrants will share equally in the cost of the political action. Rather, it is the potential for free riding that is the bugbear for expanding industries tempted to engage in costly lobbying. If an organized pressure group cannot prevent latecomers from entering the industry after a lobbying effort has been made and without contributing for its cost, then the early entrants will find little incentive to lobby in political equilibrium. This is true regardless of whether the new entrants dissipate all of the rents from lobbying or not. We then discuss the implications of this finding for economic growth. Our conclusion is that political institutions can significantly affect an economy's rate of growth.

PD December 1995. **TI** Technological Determinants of Trade. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 44/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 22. **PR** no charge. **JE** D92, F11, O33. **KW** Trade. Technology. Innovation.
AB We provide a non-technical review of the literature on technological determinants of international trade. The older literature assumed exogenous technologies. Recently much of the effort has been on explaining technological change, the way it feeds foreign trade, and the way it is affected by foreign trade. We deal with technological change that results from learning-by-doing and from innovation and initiation. We describe the relationship between each one of these forms of change in technology with international trade. We show that there are important common themes and results in these different strands of the literature.

PD January 1996. **TI** Intergenerational Redistribution With Short-Lived Governments. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 2/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 35. **PR** no charge. **JE** D74, H21, D72, C73. **KW** Intergenerational Distribution. Pressure Groups. Taxation.
AB We study the politics of intergenerational redistribution in an overlapping-generations model with short-lived governments. The successive governments - who care about the welfare of the currently living generations and possibly about campaign contributions - are unable to pre-commit the future course of redistributive taxation. In a stationary politico-economic equilibrium, the tax rate in each period depends on the current state of the economy and all expectations about future political outcomes are fulfilled. We find that there exist multiple stationary equilibria in many political settings. Steady-state welfare is often lower than it would be in the absence of redistributive politics.

PD April 1996. **TI** Electoral Competition with Policy Compromise. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 10/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 30. **PR** no charge. **JE** D72, C11, D78. **KW** Electoral Competition. Policy Compromise.
AB We study the electoral competition between two parties vying for seats in a legislature. The electorate includes knowledgeable voters and impressionable voters, the latter susceptible to electioneering activities. A special interest group provides campaign financing in exchange for influence over the platforms. The parties take positions on two issues, one on which their divergent platforms are fixed and another pliable issue where their announcements are used to woo dollars and votes. The interest group contributes with the knowledge that the final policies will be a compromise between the positions of the two parties.

PD April 1996. **TI** Common Agency and Coordination: General Theory and Application to Tax Policy. **AU** Grossman, Gene M.; Dixit, Avinash; Helpman, Elhanan. **AA** Grossman and Dixit: Princeton University. Helpman: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 11/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 23. **PR** no charge. **JE** D72, D33, H23. **KW** Common Agency. General Theory. Tax Policy.
AB We develop a model of common agency with complete information and general preferences with non-transferable utility, and prove that the principals' Nash equilibrium in truthful strategies implements an efficient action. We apply this theory to construct a positive model of public finance, where organized special interests can lobby the government for consumer and producer taxes or subsidies and targeted lump-sum taxes or transfers. The lobbies use only the non-distorting transfers in their non-cooperative equilibrium, but their inter-group competition for transfers turns into a prisoners' dilemma in which the government captures all the gain that is potentially available to the parties. Therefore we suggest that pressure groups capable of sustaining an ex-ante agreement will make a commitment to forgo direct transfers and to confine their lobbying to distorting taxes and subsidies.

Grossman, Herschel I.

PD January 1995. **TI** Chapter 8: Insurrections. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/1; Department of Economics, Brown University, Providence, RI 02912. **PG** 32. **PR** no charge. **JE** D74. **KW** Conflict. Insurrections. Property Rights. Revolutions. Sovereign Power.
AB This essay develops an economic theory of insurrections. The decision-making agents in this theory are an incumbent ruler, a potential leader of an insurrection, and a large number of peasant or worker families. The essay distinguishes insurrections that attempt only to appropriate current income from revolutions, which are insurrections that attempt to effect

permanent change in the distribution of income through the appropriation of sovereign power. The analysis shows how the technology of insurrection, together with a discount factor, determines whether there is an insurrection, the allocation of resources among productive activities, soldiering, and insurgency, and the probable outcome of an insurrection.

PD January 1995. **TI** The Economics of Revolutions. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/2; Department of Economics, Brown University, Providence, RI 02912. **PG** 23. **PR** no charge. **JE** D74. **KW** Insurrections. Revolutions. Resource Allocation. Sovereign Power.

AB This paper develops an economic theory of revolutions. The decision- making agents in this theory are an incumbent ruler, a potential revolutionary leader, and a larger number of peasants or workers. The important structural parameters in this theory are a discount factor, which helps to determine the value attached to being the ruler in the future, and two parameters of the technology of revolution. One of these parameters directly influences the effectiveness of insurgents relative to the ruler's soldiers. The other parameter determines the sensitivity of the ruler's popularity to his policies. The analysis shows how these parameters determine whether there is a revolution, the probability that the revolution succeeds, the allocation of resources among productive activities, soldiering, and insurgency, the expected incomes of the peasants or workers, and the expected wealth of the clienteles of the ruler and the revolutionary leader. Among other results, the analysis reveals that in equilibrium the likelihood of a successful revolution and the expected income of the representative peasant or worker are negatively related, but the likelihood of a successful revolution can be either positively or negatively related to an index of current aggregate economic welfare. If either the technology of revolution is better or passive support for a revolution is less sensitive to the fraction of market production taken by the ruler's clientele, then a successful revolution is more likely and both the expected income of the representative peasant or worker family and current aggregate economic welfare are smaller. But, if the discount factor is larger, although the expected income of the representative peasant or worker family is larger, a successful revolution is less likely and current aggregate economic welfare is smaller, because more resources are devoted to either deterring or suppressing a revolution.

PD April 1995. **TI** American Fiscal Policy in the 1990's. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/15; Department of Economics, Brown University, Providence, RI 02912. **PG** 10. **PR** no charge. **JE** H62, H63. **KW** Fiscal Policy. Public Debt. Taxation.

AB This essay analyzes current fiscal policy in the United States within an historical context. The objective is to clarify why recent developments in the United States are troubling, but also to understand why the United States, in contrast to Italy, has so far avoided the path to fiscal disaster.

PD November 1995. **TI** Predation and Accumulation. **AU** Grossman, Herschel I.; Kim, Minseong. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/35; Department of Economics, Brown University, Providence, RI 02912. **PG** 25. **PR** no charge. **JE** D23, D74, E21, O41. **KW** Predation. Capital Accumulation. Economic Growth. Deterrence.

AB This paper incorporates the economic theory of predation into the theory of economic growth. The analytical framework is a dynamic general-equilibrium model of the interaction between two dynasties, one of which is a potential predator and the other is its prey. Each generation of each dynasty has to decide how to allocate its endowment of inherited wealth not only to consumption and productive capital, as in standard growth models, but also to either defensive fortifications or offensive weapons. Productive capital forms the basis for accumulation of wealth, but in each generation predation can cause both the destruction of wealth and a redistribution of wealth from the prey dynasty to the predator dynasty. We find that, if the current wealth of the potential predator dynasty is small relative to the current wealth of the prey dynasty, then the current generation of the prey dynasty chooses to tolerate predation rather than to deter predation. We also find that over generations the security of the prey dynasty's property and the rate of accumulation of the prey dynasty's productive capital both steadily decrease, while the inherited wealth of the predator dynasty grows relative to the inherited wealth of the prey dynasty. Eventually, a generation of the prey dynasty will find that with predation its property would be so insecure that it is better off increasing its defensive fortifications sufficiently to deter predation. Importantly, the relation between the security of the prey dynasty's property and its accumulation of productive capital, both of which are endogenous in the process of economic growth, is neither continuous nor monotonic. Generations of the prey dynasty that choose to deter predation, even though their property is perfectly secure, accumulate productive capital more slowly than the preceding generations that tolerated predation. Even if deterrence becomes a better choice for the prey dynasty than tolerating predation, deterrence is a costly choice.

PD January 1996. **TI** Morality, Predation, and Welfare. **AU** Grossman, Herschel I.; Kim, Minseong. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 96/1; Department of Economics, Brown University, Providence, RI 02912. **PG** 20. **PR** no charge. **JE** A13, D74. **KW** Morality. Predation. Welfare. Moral Decay. Moral Revival.

AB This paper analyzes the implications of predatory behavior for economic welfare and for the pattern of rewards to productive and predatory activities. The paper also analyses the evolution of the intensity of predation over time. The analytical framework is a general- equilibrium model in which some people are moral and other people are amoral and in which amoral people choose to be either producers or predators. This model reveals that, because deterring predation is costly, moral people, as well as amoral people, are better off if the fraction of people who are potential predators - that is, the fraction of people who are amoral - is small, even though a small fraction of people who are potential predators results in an equilibrium with a positive number of predators. Thus, equilibria with a positive number of predators are Pareto superior to equilibria with no predators. In addition, the fact that in equilibria with a positive number of predators the income of an amoral person is larger than the net income of a moral person explains why both the fraction of people who are amoral and the intensity of predation tend to increase over generations. But, periodic moral revivals prevent the fraction of people who are amoral from reaching a long-run equilibrium. The paper develops theories of moral decay and moral revival.

Grove, Andrew S.

TI Strategic Dissonance. **AU** Burgelman, Robert A.; Grove, Andrew S.

Grubb, Farley

PD August 1996. **TI** Lilliputians and Brobdingnagians, Stature in British Colonial America: Evidence From Servants, Convicts, and Apprentices. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 96/9; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 26. **PR** not available. **JE** I12, I32, I31, N31. **KW** Height. Colonial America. Health.

AB The height of runaway servants in colonial America is used to augment knowledge of 18th-century British and American stature gathered from military records. While transported British convict servants were the tallest among servants, and considerably taller than British military recruits, they were still shorter than American-born military recruits.

Gruber, Jonathan

PD June 1995. **TI** Tax Subsides to Employer-Provided Health Insurance. **AU** Gruber, Jonathan; Poterba, James. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5147; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 56. **PR** $5.00. **JE** H21, H24, I19. **KW** Tax Subsidy. Health Insurance. Employer Contributions.

AB This paper investigates the current tax subsidy to employer-provided health insurance and presents new evidence on the economic effects of various tax reforms. It argues that previous analyses have overstated the tax subsidy to employer-provided insurance by neglecting the substantial and growing importance of after-tax employee payments for employer-provided insurance, as well as the tax subsidy for extreme medical expenses, which discourages insurance purchase. Even after considering these factors, however, the net tax subsidy to employer- provided insurance is substantial, with tax factors generating an average reduction of approximately thirty percent in the price of this insurance. Reducing the tax subsidy, either by capping the value of employer-provided health insurance that could be excluded from taxation, or eliminating the exclusion entirely, would have substantial effects on the level of employer-provided insurance and on tax revenues.

Gual, Jordi

PD January 1995. **TI** The Coherence of EC Policies on Trade, Competition and Industry. **AA** European Commission, Belgium. **SR** Centre for Economic Policy Research, Discussion Paper: 1105; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 52. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, L40, L51, L52. **KW** Trade Policy. Competition Policy. Industrial Policy.

AB This paper assesses the coherence between industrial policy, competition policy and trade policy in the European Union (EU). This assessment is undertaken from the perspective of the optimal deployment of economic policies as prescribed by economic analysis and takes into consideration the legal mandate and the institutional constraints imposed by EU treaties and regulations. The analysis shows that as a result of the limited policy tools available to the Union, trade and competition policies have to fulfill several competing goals. This multiplicity of objectives leads to non-optimal interventions. Policy inconsistencies arise also between trade/competition policies and the industrial policy of Member States. Current policy practice leads to inefficient outcomes both in mature and sunrise industries. These inefficiencies could be reduced with a reinforcement of integration policies (notably, state aid control). The paper argues that the current institutional arrangements allow for a strengthening of centralized industrial policy, however, which could be usefully utilized to achieve more efficient outcomes. Other policy conflicts, mostly between trade and competition policies, are also discussed.

Haliassos, Michael

TI Precautionary Portfolio Behavior from a Life-Cycle Perspective. **AU** Bertaut, Carol C.; Haliassos, Michael.

Halpern, Laszlo

PD April 1995. **TI** Equilibrium Real Exchange Rates in Transition. **AU** Halpern, Laszlo; Wyplosz, Charles. **AA** Halpern: The Hungarian Academy of Sciences. Wyplosz: INSEAD. **SR** Centre for Economic Policy Research, Discussion Paper: 1145; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 42. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E63, F31, P41, P52. **KW** Exchange Rate. Transition. Overvaluation. Central Europe. Eastern Europe.

AB This paper tests two central assumptions regarding transforming economies: that the initial exchange rates were strongly undervalued and that the subsequent evolution of the real exchange rate was both a response to the initial undervaluation and an equilibrium real appreciation. The econometric results support both assumptions. The degree of initial overvaluation varies from country to country, ranging from very little in the case of Hungary to more than 100 per cent in most other countries. It is estimated using a sample of 49 high- and middle-income countries, with five observations per country (1970, 1975, 1980, 1985, 1990). The subsequent process of equilibrium appreciation is estimated with pooled data for six countries (Croatia, the Czech Republic, Hungary, Poland, Slovakia and Slovenia) covering the period after inflation stabilization.

Haltiwanger, John

TI Measuring Gross Worker and Job Flows. **AU** Davis, Steven J.; Haltiwanger, John.

Hamilton, Bruce W.

PD March 1996. **TI** Competition and Car Longevity. **AU** Hamilton, Bruce W.; Macauley, Molly. **AA** Hamilton: Johns Hopkins University. Macauley: Resources for the Future. **SR** Johns Hopkins University, Department of Economics, Working Paper: 361; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 30. **PR** no charge. **JE** L62, D12, L15. **KW** Durability. Aftermarkets. Market Power.

AB The life expectancy of automobiles in the United States rose 25 percent from 1957 to 1979. We show that virtually all of the increase was caused by a reduction in the price of replacement/repair parts (not a durability increase). This parts-price decline was caused by increasing competition. This confirms a prediction of Hamilton and Mary Burke: A durable-good monopolist with aftermarket power takes a larger markup in the aftermarket than in the primary market. This saves the monopolist from the Coase temptation to cut prices; he sets the original-equipment price low, and takes profit in the (nondurable) repair market.

PD March 1996. **TI** The Coase Conjecture in Continuous Time: Imperfect Durability, Endogenous Durability, and Aftermarkets. **AU** Hamilton, Bruce W.; Burke, Mary. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 362; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 23. **PR** no charge. **JE** L12, L15, D21. **KW** Coase Conjecture. Limited Durability. Aftermarket.
AB We derive perfect rational expectations equilibria for durable-goods monopolists of three sorts: (1) the lifetime of the good is finite but exogenous; (2) the lifetime of the good is finite but endogenous, determined by the original equipment manufacturer (OEM) at the time of manufacture; and (3) the lifetime of the good depends jointly upon built-in durability and consumer maintenance. In the third case the OEM has monopoly power some maintenance parts. There is no "trading period;" the manufacturer is free to cut price without notice at any time. Findings are (1) with exogenous durability, the Coase temptation has little effect on profit if the lifetime of the good is less than about 20 years; (2) almost regardless of cost-function parameters, a monopolist will cut durability to under a decade to save itself from Coase; (3) a monopolist with power over maintenance parts will take most of its profit on parts rather than original equipment. In all three cases, the Coase force offers little to no protection to consumers.

Hanemann, W. Michael

TI Valuation and Management of Tropical Forests: Implications of Uncertainty and Irreversibility. **AU** Albers, Heidi; Fisher, Anthony C.; Hanemann, W. Michael.

PD May 1996. **TI** Economic Analysis in Policy Evaluation, Damage Assessment and Compensation; A Comparison of Approaches. **AU** Hanemann, W. Michael; Keeler, Andrew G. **AA** Hanemann: University of Berkeley. Keeler: University of Georgia. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 766; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 17. **PR** $5.00 Domestic; $10.00 International Surface Rate. **JE** I31, Q28, Q21, D61. **KW** Environmental Policy. Natural Resources. Damage Assessment. Environment Policy. Welfare.
AB In takings litigation and regulation, a trend is emerging to make economic studies central to the outcome of the administrative or judicial processes that determine winners and losers and set the de facto incentives that guide behavior. Because of this trend, it seems appropriate to investigate the methodologies that will be used. How are these studies conducted? What economic principles are applied? Are they applied in the same way in each arena? If not, is there any cogent rationale for the differences? This paper represents some initial observations on these themes rather than definitive conclusions.

Hanson, Gordon H.

TI Foreign Investment, Outsourcing and Relative Wages. **AU** Feenstra, Robert C.; Hanson, Gordon H.

TI Foreign Direct Investment and Relative Wages: Evidence from Mexico's Maquiladoras. **AU** Feenstra, Robert C.; Hanson, Gordon H.

Harrington, Joseph E., Jr

PD July 1994. **TI** A Spatial Theory of Positive and Negative Campaigning. **AU** Harrington, Joseph E., Jr.; Hess, Gregory D. **AA** Hess: University of Kansas. Harrington: Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 344; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 22. **PR** no charge. **JE** D72, D43, M37. **KW** Campaign Strategy. Advertising. Spatial Competition.
AB For the purposes of exploring the content of electoral campaigns, this makes two modifications to the Hotelling model of spatial competition. First, instead of allowing costless location, we assume that agents are endowed with initial locations and engage in costly re- location. Second, the extent of an agent's re-location is not fully under its control but rather is partially determined by the actions of its rival. Within the electoral context, the idea is that candidates inherit a perceived ideology and conduct campaigns to shift that perception. The decision we investigate is how a candidate allocates resources between positive campaigning - which influences the perceived ideology of one's opponent. Our theory predicts a relationship between a candidate's personal attributes and the style of their campaign: the candidate who is perceived by voters as having less attractive personal attributes runs a relatively negative campaign while the candidate who is stronger in terms of personal attributes runs a relatively positive campaign. The implications of this theory are illustrated for the 1988 presidential election.

PD November 1994. **TI** Durable Goods Monopoly With Uninformed Consumers. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 342; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 29. **PR** no charge. **JE** L12, L15, D83. **KW** Durable Goods. Monopoly. Sales.
AB This paper characterizes the steady-state price path for a durable goods monopolist when consumers randomly flow into the market each period. Upon their arrival in the market, consumers are assumed to have very little information about the industry's history, and, as a result, are uncertain of the future price path. Equilibrium entails the firm conducting periodic unanticipated sales. The equilibrium timing and depth of sales is explored.

Harvey, Campbell R.

TI Emerging Equity Market Volatility. **AU** Bekaert, Geert; Harvey, Campbell R.

Hauber, A. Brett

TI Choice Set Boundaries in a Random Utility Model of Recreation Demand. **AU** Parsons, George R.; Hauber, A. Brett.

Heady, Christopher

PD March 1995. **TI** Tax and Benefit Reform in the Czech and Slovak Republics. **AU** Heady, Christopher; Smith, Stephen. **AA** Heady: University of Bath. Smith: Institute for Fiscal Studies. **SR** Centre for Economic Policy Research, Discussion Paper: 1151; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 40. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** H23, H24, H55. **KW** Tax Reform. Fiscal Policy. Social Security. Czech Republic.

AB This paper analyzes the changes to the tax and social security systems that have occurred since Czechoslovakia's "velvet revolution" in 1989. It shows how the tax system is moving to meet the requirements of a market economy. It suggests that a particularly high priority has to be given to avoiding taxes which require administrative discretion and to reducing administrative complexity. A tax-benefit model is used to look at two particular aspects of tax and social security design. It shows that the administratively convenient move to a single-rate VAT could have been achieved without adverse distributional effects, but with a slight increase in overall marginal tax rates. It also analyzes the effects of the Czech plan for replacing universal benefits with means-tested benefits. This is shown to reduce budgetary costs and reduce poverty, but at the expense of increasing marginal tax rates.

Heller, Dana

TI Naive Strategies in Competitive Games. **AU** Rubinstein, Ariel; Tversky, Amos; Heller, Dana.

Hellmann, Thomas

PD April 1995. **TI** Financial Restraint: Towards a New Paradigm. **AU** Hellmann, Thomas; Murdock, Kevin; Stiglitz, Joseph. **AA** Hellmann and Murdock: Stanford University. Stiglitz: Washington, D.C. **SR** Stanford Graduate School of Business Research Paper: 1355; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 47. **PR** no charge. **JE** G21, O16. **KW** Banking. Deposits. Developing Markets.

AB This paper examines a set of financial policies, called financial restraint, that address financial market stability and growth in an initial environment of low financial deepening. Unlike with financial repression, where the government extracts rents from the private sector, financial restraint calls for the government to create rent opportunities in the private sector. These rent opportunities induce outcomes that are more efficient than either financial repression or laissez-faire policies. It is argued that deposit rate controls and restrictions on competition create franchise value in financial markets that curtails moral hazard behavior among financial intermediaries. Lending rate controls may also increase the efficiency of intermediation by reducing agency cost in loan markets.

PD July 1995. **TI** Deposit Mobilization through Financial Restraint. **AU** Hellmann, Thomas; Murdock, Kevin; Stiglitz, Joseph. **AA** Hellmann and Murdock: Stanford University. Stiglitz: Washington, D.C. **SR** Stanford Graduate School of Business Research Paper: 1354; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 32. **PR** no charge. **JE** G21, O16. **KW** Banking. Deposits. Developing Markets.

AB By creating rent opportunities that induce agents to take socially beneficial actions, a better outcome may be achieved than under a free market system with laissez faire. This paper asks the question under what circumstances banks have incentives to increase their deposit collection efforts. We compare outcomes under a perfectly competitive market with outcomes under financial restraint, i.e., a combination of deposit rate controls and restrictions on competition. In the first model we show that temporary exclusive rights may be an efficient way of inducing banks to open branches in new areas. In the second model we show that deposit rate controls can induce banks to grow the deposit market.

PD October 1995. **TI** A Unifying Theory of Credit and Equity Rationing in Markets with Adverse Selection. **AU** Hellmann, Thomas; Stiglitz, Joseph. **AA** Hellmann: Stanford University. Stiglitz: Washington, D.C. **SR** Stanford Graduate School of Business Research Paper: 1356; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 51. **PR** no charge. **JE** G21, D43, D82, D83. **KW** Banking. Deposits. Developing Markets.

AB In their 1981 model, Stiglitz and Weiss demonstrated that there may be credit rationing in markets with adverse selection. Work by Cho and DeMeza and Webb has subsequently shown that rationing would disappear in the 1981 model if entrepreneurs seek funds on an equity market, rather than on a credit market. Using a different set of assumptions, Myers and Majluf and Greenwald, Stiglitz and Weiss show that equity markets may also feature rationing. A question that remains is whether the models of credit and equity rationing can be made compatible. The analysis of DeMeza and Webb suggest that this is not possible in models with one- dimensional asymmetric information. In this paper we consider a model with two-dimensional asymmetric information: entrepreneurs know more about both the expected returns and the risk of their projects. We examine how entrepreneurs self-select between the credit and equity market, and ask whether in equilibrium there can be rationing in one or both of these markets. Our main result is that credit and equity rationing are not only compatible, but in fact that competition between the credit and equity market may give rise to adverse selection that generates these rationing equilibria.

PD December 1995. **TI** Financial Sector Development Policy: The Importance of Reputational Capital and Governance. **AU** Hellmann, Thomas; Murdock, Kevin. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1361; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 42. **PR** no charge. **JE** G32, O16, L52. **KW** Corporate Governance. Reputation. Banking. Regulation.

AB This paper asserts that any consideration of an appropriate policy formulation for financial institutions must first begin by recognizing the fundamental character of financial transactions -- that something of real value today is exchanged for a promise of payment in the future. The quality of financial intermediation in an economy will depend critically on the quality of the promises that are made by financial institutions and by their end-users (borrowers). Financial markets function to deliver two outputs -- allocation of capital and governance of its use. Government policy must place significant emphasis on the development of appropriate governance structures. One mechanism that can greatly enhance the credibility of financial transactions is the development of reputational capital -- the capitalized value of future profitability of the enterprise, due to its good reputation. When an enterprise has significant reputational capital, its incentives shift from a focus on rent extraction to a focus on rent creation.

Helpman, Elhanan

PD December 1994. **TI** A Time to Sow and a Time to Reap: Growth Based on General Purpose Technologies. **AU** Helpman, Elhanan; Trajtenberg, Manuel. **AA** Tel Aviv University. **SR** Centre for Economic Policy Research, Discussion Paper: 1080; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 32. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E32, O31, O41, O47. **KW** Growth. Productivity. Technology.

AB We develop a model of growth driven by successive improvements in General Purpose Technologies (GPTs), such as the steam engine, electricity, or microelectronics. Each new generation of GPTs prompts investments in complementary inputs and impacts the economy after enough such compatible inputs become available. The long-run dynamics take the form of recurrent cycles; during the first phase of each cycle output and productivity grow slowly or even decline, and it is only in the second phase that growth starts in earnest. The historical record of productivity growth associated with electrification, and perhaps also of computerization lately, may offer supportive evidence for this pattern. In lieu of analytical comparative dynamics, we conduct simulations of the model over a wide range of parameters and analyze the results statistically. We extend the model to allow for skilled and unskilled labor, and we explore the implications for the behavior over time of their relative wages. We also explore diffusion in the context of a multi-sector economy.

TI North-South Research and Development Spillovers. **AU** Coe, David T.; Helpman, Elhanan; Hoffmaister, Alexander.

TI Technology and Trade. **AU** Grossman, Gene M.; Helpman, Elhanan.

PD May 1995. **TI** The Size of Regions. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 14/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 24. **PR** no charge. **JE** R12, R11, R14. **KW** Regions. Size. Efficiency.

AB Regional formations depend on a variety of economic and geographic features. Some of them push towards concentration, while others push towards dispersion. The final outcome depends on the relative strength of these pressures. This paper examines the emerging size of regions when there are local stocks of available housing, an industry that manufactures differentiated products can locate in either region, individuals move freely across regions, and there are transport costs of industrial products (housing is a non-trade good). These forces lead to dispersed regional structures whenever transport costs are low, or the elasticity of substitution across differentiated products is high, or the demand for housing is high. When transport costs are high, the elasticity of substitution is low and the demand for housing is low, regions differ in size even when their intrinsic characteristics are the same. Under these circumstances there is too little agglomeration, which means that the equilibrium inequality in the size of regions is not big enough. These results differ from the findings of Krugman. The reasons for these differences are explored in some detail.

TI Rent Dissipation, Free Riding, and Trade Technology. **AU** Grossman, Gene M.; Helpman, Elhanan.

TI Technological Determinants of Trade. **AU** Grossman, Gene M.; Helpman, Elhanan.

TI Intergenerational Redistribution With Short-Lived Governments. **AU** Grossman, Gene M.; Helpman, Elhanan.

TI Electoral Competition with Policy Compromise. **AU** Grossman, Gene M.; Helpman, Elhanan.

TI Common Agency and Coordination: General Theory and Application to Tax Policy. **AU** Grossman, Gene M.; Dixit, Avinash; Helpman, Elhanan.

TI R&D Spillovers and Global Growth. **AU** Bayoumi, Tamim A.; Coe, David T.; Helpman, Elhanan.

Henderson, Dale W.

PD October 1995. **TI** Uncertainty, Instrument Choice, and the Uniqueness of Nash Equilibrium: Microeconomic and Macroeconomic Examples. **AU** Henderson, Dale W.; Zhu, Ning S. **AA** Henderson: Board of Governors of the Federal Reserve System. Zhu: The World Bank. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 526; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 56. **PR** no charge. **JE** C72, D43, E52, F42. **KW** Uncertainty. Instrument Choice. Duopoly. Monetary Policy. Joint Costs.

AB This paper contains two examples of static, symmetric, positive-sum games with two strategic players and a play by nature: (1) a microeconomic game between duopolists with joint costs facing uncertain demands for differentiated goods and (2) a macroeconomic game between two countries with inflation-bias preferences confronting uncertain demands for moneys. In both examples, each player can choose either of two variables as an instrument, and reaction functions are linear in the chosen instruments. With no uncertainty, there are four (Nash) equilibria, one for each possible instrument pair, because each player is indifferent between instruments given the instrument choice and instrument value of the other player. With uncertainty in the form of an additive disturbance, there are fewer equilibria because each player is not indifferent between instruments. These results are in accordance with the logic of Poole (1970) and Weitzman (1974) as explained by Klemperer and Meyer (1986) using examples of differentiated duopoly games with independent costs. In their main example with linear reaction functions, there is always a unique equilibrium. In contrast, in each of our examples with uncertainty, there is a unique equilibrium for some parameter values, but there are two equilibria for others. It is somewhat surprising that in both the Klemperer and Meyer example and our examples with unique equilibria, for some parameter values with the smallest amount of uncertainty the symmetric instrument pair chosen in the unique equilibrium is the one that yields the lower payoff with no uncertainty.

Henderson, Rebecca

PD April 1995. **TI** Universities as a Source of Commercial Technology: A Detailed Analysis of University Patenting 1965-1988. **AU** Henderson, Rebecca; Jaffe, Adam B.; Trajtenberg, Manuel. **AA** Henderson: Massachusetts Institute of Technology. Jaffe: Brandeis University. Trajtenberg: Tel-Aviv University. **SR** Tel Aviv Sackler Institute of

Economic Studies Working Paper: 9/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 44. **PR** no charge. **JE** D61, O34. **KW** Patents. Universities. Citations.

AB This paper explores changes in both the number and nature of university patents, using a data base constructed by collecting all university patents granted between 1965 and mid-1992, a random sample of 1 percent of all patents during the same period, and all patents after 1974 that cited either the university or the random-sample patents. We show that universities' propensity to patent has increased considerably over the last twenty years: university patents have increased 15-fold, while real university research spending almost tripled. The causes of this increase are unclear, but may include increased focus on commercially relevant technologies, increased funding of university research, 1980 change in federal law that facilitated patenting of results from federally funded research, and the widespread creation of formal technology licensing offices at universities. This concentration has fallen somewhat over time, as the number of institutions taking out patents has increased dramatically. University patenting is much more concentrated in biological and medical technologies than is the universe of patenting, and this sector has been the most rapidly growing.

Henderson, Vernon

PD May 1995. **TI** Effects of Air Quality Regulation. **AA** Brown University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5118; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $5.00. **JE** K32, Q25, Q28, R38. **KW** Environmental Regulation. Air Quality. Industrial Location.

AB This paper investigates the effects of local regulatory effort on ground level ozone air quality and on industrial location. Local regulatory effort varies by annual air quality attainment status and by state attitudes towards the environment. A switch from attainment to nonattainment status induces greater regulatory effort in a county, leading to an improvement in air quality. Air quality readings for ground level ozone improve by 3-8 percent depending on the exact air quality measure, following a switch to non-attainment status. Pro- environment states, which ceteris paribus, spend relatively more on pollution abatement also have cleaner air. A 1.0 percent increase in typical annual state pollution abatement expenditures leads to about a polluting industries show a tendency to move to counties with a record of clean air, where they are less likely to be hassled. A county switching to having a three-year record of attainment experiences a 7-9 percent growth in the number of heavy polluting establishments. This implies polluting industries are spreading out geographically moving from non-attainment (polluted) areas to attainment (initially less polluted) areas. Finally, for ozone, localities may improve the annual hourly extreme values reading used to measure officially local air quality, without improving measures (means, medians, medians of daily maximum) of more typical ozone conditions. This occurs by spreading out economic activity over the day to dampen peaks of ozone inducing activity and subsequent daily ozone peaks.

Hercowitz, Zvi

TI Fiscal Policy and Saving Under Distortionary Taxation. **AU** Dahan, Momi; Hercowitz, Zvi.

Hess, Gregory D.

TI A Spatial Theory of Positive and Negative Campaigning. **AU** Harrington, Joseph E., Jr.; Hess, Gregory D.

Hodrick, Robert J.

TI On Biases in Tests of the Expectations Hypothesis of the Term Structure of Interest Rates. **AU** Bekaert, Geert; Hodrick, Robert J.; Marshall, David A.

Hoekman, Bernard M.

PD January 1995. **TI** The WTO's Agreement on Government Procurement: Expanding Disciplines, Declining Membership? **AU** Hoekman, Bernard M.; Mavroidis, Petros C. **AA** Hoekman: World Bank. Mavroidis: GATT Secretariat, Switzerland. **SR** Centre for Economic Policy Research, Discussion Paper: 1112; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 21. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, H57. **KW** Government Procurement. Multilateral Agreements. Trade Policy. GATT.

AB With the reintroduction of agriculture and textiles and clothing into the GATT, the absence of general rules on procurement has become the major hole in the coverage of the GATT. This paper provides an analysis of the new Government Procurement Agreement that was negotiated between a subset of GATT members in the Uruguay Round, focusing in particular on the expansion of coverage to services and the strengthening of enforcement mechanisms. The latter represent an innovation by allowing for private parties to invoke the Agreement before national courts. The question of why membership of the Agreement remains limited is explored. Pursuit of tariffication is suggested as an avenue through which the Agreement might be expanded to cover all WTO Members.

PD March 1995. **TI** Tentative First Steps: An Assessment of the Uruguay Round Agreement on Services. **AA** The World Bank. **SR** Centre for Economic Policy Research, Discussion Paper: 1150; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 47. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, F42. **KW** Trade in Services. GATS. Trade Policy. Multilateral Trade Negotiations.

AB The General Agreement on Trade in Services (GATS) is a landmark in terms of creating multilateral disciplines in virgin territory, but is a failure in terms of generating liberalization and locking-in existing policy regimes affecting international transactions in services. There are two key issues that should be addressed in evaluating the GATS. First, what does it do to bind policies? Second, has it established a mechanism that will induce significant liberalization through future rounds of negotiations? This paper concludes that the GATS does not score very high on either dimension. A number of suggestions are made to strengthen the Agreement and support more far-reaching liberalization in the future.

Hoffmaister, Alexander

TI North-South Research and Development Spillovers. **AU** Coe, David T.; Helpman, Elhanan; Hoffmaister, Alexander.

Hoffman, Saul D.

TI Fixed Effect Estimates of Neighborhood Effects. **AU** Plotnick, Robert D.; Hoffman, Saul D.

PD August 1995. **TI** The Dynamics of Non-Marital Childbearing: Life-Cycle and Cohort Estimates. **AU** Hoffman, Saul D.; Foster, E. Michael. **AA** Hoffman: University of Delaware. Foster: Vanderbilt University. **SR** University of Delaware, Department of Economics, Working Paper: 95/07; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 17. **PR** not available. **JE** J13, J16, J12. **KW** Marriage. Childbearing. Single Mothers.

AB Very little is known about the dynamics of non-marital childbearing, that is, about changes in a woman's marital status at birth over her life-cycle. In this paper, we use a new data from the Panel Study of Income Dynamics to describe the dynamics of non-marital childbearing, especially the changing life-cycle patterns by cohort and race. Where previously women with non-marital births also typically had marital births, this has become much less common. The proportion of women with non-marital births who have only non-marital births has increased far more rapidly across cohorts than the corresponding illegitimacy ratio.

Hoffmann, Sandra

PD January 1995. **TI** The Role of Defense Cuts in the California Recession: Computable General Equilibrium Models and Interstate Factor Mobility. **AU** Hoffmann, Sandra; Robinson, Sherman; Subramanian, Shankar. **AA** Hoffmann and Robinson: University of California, Berkeley. Subramanian: Cornell University. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 741; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 43. **PR** $10.75 Domestic; $21.50 International Surface Rate. **JE** D58, H57, J61, R13, R38. **KW** Defense Procurement. Factor Migration. General Equilibrium. Computable Models.

AB This study develops a computable general equilibrium (CGE) model to examine the impact of recent defense cuts on California's economy. The study demonstrates use of a CGE model to examine the sensitivity of regional economy models to assumptions about factor migration. The results show that California is indeed sensitive to defense cuts, but that the perceptions of workers and producers about the permanency of the cuts and about other future opportunities in the state economy significantly affect gross state product (GSP) multipliers. Depending on how these perceptions affect factor migration, GSP multipliers can be expected to range from 1 to almost 5.

Hooper, Peter

PD October 1995. **TI** International Comparisons of the Levels of Unit Labor Costs in Manufacturing. **AU** Hooper, Peter; Vrankovich, Elizabeth. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 527; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 66. **PR** no charge. **JE** F31, J31, J32, O57. **KW** Labor Costs. Productivity. Purchasing Power Parity.

AB Comparing absolute levels of unit labor costs across countries entails translating labor compensation rates and productivity measured in national currencies into a common currency (e.g., U.S. dollars). Compensation rates are translated using market exchange rates and productivity is translated using relative output price levels. This paper focuses on the estimation of relative output price levels. Two approaches have been used, one based on relative unit values and the other on expenditure PPPs. We use primarily the latter approach and extend earlier work in this area by adjusting expenditure PPPs for biases introduced by indirect taxes, distribution margins, and trade prices. We compute for each of the G-7 industrial countries unit labor cost levels in U.S. dollars for total manufacturing and for various subsectors of manufacturing. Our estimates suggest that in 1995, U.S. unit labor costs were substantially below those in Japan and Germany, somewhat below those in France and the United Kingdom, and very similar to those in Canada and Italy. The cross-country differences we find are somewhat larger than -- albeit qualitatively similar to -- those obtained using the unit value approach.

Hopper, Gregory P.

PD October 1994. **TI** The Dynamics Of The Exchange Rate Under A Crawling Peg Regime: A Game Theory Approach. **AA** Hopper: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/5; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 72. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** F31, F33, C73. **KW** Game Theory. Crawling Peg. Foreign Exchange.

AB In this paper, we model the transition to a nominal peg by setting up a two-country international dynamic game in which the domestic country announces at time 0 that at time T it will peg the exchange rate at a specific value. The domestic and foreign economies are symmetric. Each country chooses its money supply time path to minimize the discounted integral of the contributions of inflation and the deviations of real output from the natural rate. The solution is calculated for both the Nash equilibrium under open loop information and the central planner solution. We find closed-form solutions for the exchange rate, the domestic and foreign price levels, and domestic and foreign outputs. Upon examination of the solutions, we find that exchange rate pegging has real effects and does not cause the exchange rate of other variables to move monotonically to their equilibrium values. Rather, exchange rate pegging produces oscillation of the exchange rate, real outputs, and the price levels of the countries. This situation cannot be corrected by conventional international policy coordination.

Hoynes, Hilary W.

TI Differential Mortality and Wealth Accumulation. **AU** Attanasio, Orazio P.; Hoynes, Hilary W.

PD June 1995. **TI** Does Welfare Play Any Role in Female Headship Decisions? **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5149; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** $5.00. **JE** I38, J11, J16. **KW** AFDC. Welfare Policy. State Effects. Household

Structure.
AB During the last thirty years, the composition of white and black families in the United States has changed dramatically. In 1960, less than ten percent of families with children were headed by a single mother, while in 1990 more than twenty percent of families with children were female headed households. A large body of research has focused on the role of the U.S. welfare system, and in particular, the Aid to Families with Dependent Children (AFDC) program, in contributing to these dramatic changes in family structure. Most studies use cross- sectional data and identify the effect of welfare on female headship through interstate variation in the AFDC program. Recent research finds that controlling for state effects has a large impact on the estimated welfare effect. This paper examines why state effects matter for estimating the role of welfare in female headship decisions by examining the importance of individual effects and policy endogeneity. A natural explanation for why state effects matter is that the composition of the population across the states differs, and the composition is related to the generosity of the state's welfare program. If that is true, then controlling for individual effects should have the same result as controlling for state effects. Second, the endogeneity of AFDC policy is examined by including controls representing the determinants of state welfare generosity. The results show that after controlling for individual effects there is no evidence that welfare contributes to increasing propensities to form female headed households for either whites or blacks. Further, the results suggest that welfare-induced migration among blacks leads to an upward bias in the estimated welfare effect in previous studies.

Hughes, Joseph

PD March 1995. **TI** Recovering Technologies That Account for Generalized Managerial Preferences: An Application to Non-Risk-Neutral Banks. **AU** Hughes, Joseph; Lang, William W.; Mester, Loretta J.; Moon, Choon-Geol. **AA** Hughes: Rutgers University. Lang: Comptroller of the Currency. Mester: Federal Reserve Bank of Philadelphia and University of Pennsylvania. Moon: Rutgers University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/8; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 50. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** M11, D81, D23. **KW** Risk Aversion. Management. Institutions.
AB The standard cost function derived by minimizing the cost of production, given the vectors of input prices and output rates, implicitly assumes that managers are risk neutral. Consequently, risk- averse bank managers who fund their loans from more costly but less volatile sources, such as core deposits, and who expend extra labor in credit evaluation and loan monitoring would be deemed in efficient from the perspective of the standard model. (Studies of efficiency have generally found X-inefficiency on the order of 10-20%). How production is organized and its cost depend on managers' attitudes toward risk. Managers may spend more to reduce risk. In this paper a managerial utility function, defined over profits, inputs, and outputs, is maximized with respect to inputs and profit, subject to the production constraint that the input mix must produce the given output vector. It allows managers to trade profit for reduced risk and other objectives. The Almost Ideal Demand System, adapted to accommodate generalized managerial preferences, is employed to obtain input share equations and a profit share equation. In the case of risk neutrality, these share equations are shown to be identically equal to standard translog cost function and input share equations. The model is estimated using 1989-90 Call Report data for U.S. banks whose assets exceed $1 billion. The empirical findings are striking. Risk neutrality is unequivocally rejected. The measure of scale economies is considerably larger than that found by most studies, and it increases with assets size, which is consistent with the recent wave of mergers among very large banks. When risk neutrality is imposed, the measure of scale economies drops in magnitude to commonly found range. Last, when asset quality, measured by the return on assets, decreases, banks tend to reduce their level of capitalization, given assets, and tend to rely more on overnight funding.

Huh, Chan

PD January 1996. **TI** Regime Switching in the Dynamic Relationship Between the Federal Funds Rate and Innovations in Nonborrowed Reserves. **AA** Board of Governors of the Federal Reserve System and the Federal Reserve Bank of San Francisco. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 536; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 29. **PR** no charge. **JE** C22, E42. **KW** Regime Switching. Inflation. Momentum. Liquidity Effect.
AB This paper examines the dynamic relationship between changes in the funds rate and nonborrowed reserves within a reduced form framework that allows the relationship to have two distinct patterns over time. A regime switching model a la Hamilton (1989) is estimated. On average, CPI inflation has been significantly higher in the regime characterized by large and volatile changes in funds rate. Innovations in money growth are associated with a strong anticipated inflation effect in this high inflation regime, and a moderate liquidity effect in the low inflation regime. Furthermore, an identical money innovation generates a much bigger increase in the interest rate during a transition period from the low to high inflation regime than during a steady high inflation period. This accords well with economic intuition since the transition period is when the anticipated inflation effect initially gets incorporated into the interest rate. The converse also holds. That is, the liquidity effect becomes stronger when the economy leaves a high inflation regime period and enters a low inflation regime period.

Hunt, Jennifer

TI The Impact of Immigrants on Host Country Wages, Employment and Growth. **AU** Friedberg, Rachel M.; Hunt, Jennifer.

Intrator, Orna

TI Panel Data with Survival: Hospitalization of HIV Patients. **AU** Lancaster, Tony; Intrator, Orna.

Irons, John S.

TI The Lucas Critique in Practice: Theory Without Measurement. **AU** Ericsson, Neil R.; Irons, John S.

Irwin, Douglas A.

PD July 1995. **TI** Industry or Class Cleavages Over Trade Policy? Evidence from the British General Election of 1923.

AA University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5170; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** $5.00. **JE** D72, F13. **KW** Voting Patterns. Industry Alignment. Factor Alignment. Trade Policy.
AB Economists and political scientists have frequently attempted to determine whether trade policy-related political action takes place along factor-lines (such as capital versus labor, as implied by the Stolper-Samuelson theorem) or along industry-lines (as implied by models with imperfect factor mobility). This paper examines voting patterns in the British general election of 1923, an election that hinged on free trade versus protection. The election provides an opportunity to distinguish between the two hypotheses because either an industry or a factor alignment among voters is plausible: rigidities in the interwar labor market have often been discussed, and electoral politics has often been viewed as having a class basis. This paper exploits data from the British census of 1921, which divides the population into categories of occupation (by industry) and categories of economic class (by income and/or skill level), and relates these data to cross-country variation in voting for the contending political parties. The results indicate that county differences in the occupational structure of the electorate account for the election outcome better than differences in class structure.

Israel, Ronen

TI Managerial Compensation and Capital Structure. **AU** Berkovitch, Elazar; Israel, Ronen; Spiegel, Yossef.

Iyer, Sridhar

PD June 1996. **TI** The Relationship Between Short-Term and Forward Interest Rates: A Structural Time Series Analysis. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 96/8; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 18. **PR** not available. **JE** E43, C22, C12. **KW** Interest Rates. Cointegration. Treasury Bill. Term Structure.
AB Evidence on U.S. interest rates shows that both short-term and forward interest rates are nonstationary in levels and the two rates cointegrated. Also, tests of the expectations hypothesis based on forward interest rates, overwhelmingly reject the joint hypothesis of rational expectations and constant (or zero) expected term premiums. In this paper, the structural time series approach is used to explain the relationship between short-term and forward interest rates and to decompose the rejection of the joint hypothesis into systematic expectation errors and time-varying expected premiums. The long run relationship between the two interest rates is examined by formulating a common trend or permanent component, while the transient effects of the relationship are explained by the transitory components in the structural time series model. A model with the one month ahead one-month rate and the current forward rate on a one-month bill to be bought one month later, is constructed from monthly data on U.S. Treasury bill rates over the period, December 1946 through February 1991. Model estimates confirm many of the observed empirical characteristics in the term structure of U.S. interest rates findings reveal that both systematic expectation errors and time-varying expected term premiums are important in explaining the rejection of the joint hypothesis.

Iyigun, Murat F.

PD September 1995. **TI** Human Capital Accumulation, Fertility and Growth: A Re-Analysis. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 523; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 16. **PR** no charge. **JE** J11, J13, O11. **KW** Fertility. Human Capital. Development Trap.
AB This paper develops an economic growth model with endogenous fertility. In doing so, it provides a new explanation for the relation between fertility, economic development and human capital accumulation. The model emphasizes the role returns on human capital play in economic development through individuals' allocation of time between acquiring human capital and production and rearing of children. In the model, production and rearing children are time intensive and accumulating human capital requires time and has a cost. Individuals' stock of human capital depends positively on the time allocated to education and on their parents' stock of human capital. Moreover, increases in the parents' stock of human capital raises the rate of return on human capital investment. As a result, individuals choose to allocate more time to education and less to producing and rearing children as their parents' stock of human capital increases. The model also demonstrates that individuals' choices on fertility and education may lead to multiple equilibria. Specifically, even if individuals' utility depends relatively more on their own consumption rather than on the number of children that they have, countries that have a low enough initial stock of human capital converge to a development trap with large families, little human capital and low output per capita.

PD September 1995. **TI** Economic Development and Intergenerational Economic Mobility. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 524; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 30. **PR** no charge. **JE** I21, J11, O11. **KW** Class Mobility. Earnings Mobility. Economic Growth.
AB This paper examines theoretically how economic growth affects intergenerational economic mobility. In the model developed in this paper, education is provided to the individuals free of cost, and admission to schools is competitive. The quantity of educational services available in any period depends on the total output of the economy in the same period. Individuals differ from each other in two respects. First, their innate mental abilities are determined by a stochastic process, and, second, their parents have different education levels. Individuals are admitted to schools based on their potential. An individual's potential is a function of her innate mental ability and her parent's education level. In this model, economic growth increases intergenerational economic mobility if and only if the effect of having an educated parent on an individual's potential is not large. Moreover, if the effect of having an educated parent is not large, then there exists a unique steady state equilibrium and all economies will progress toward increased mobility. The model also shows that economic growth reduces the income difference between educated and uneducated labor if and only if the effect of having an educated parent on an individual's potential is not large. And, although population growth reduces

intergenerational economic mobility, technological progress increases it.

Jaffe, Adam B.

TI Universities as a Source of Commercial Technology: A Detailed Analysis of University Patenting 1965-1988. **AU** Henderson, Rebecca; Jaffe, Adam B.; Trajtenberg, Manuel.

Jappelli, Tullio

PD January 1995. **TI** The Welfare Effects of Liquidity Constraints. **AU** Jappelli, Tullio; Pagano, Marco. **AA** Jappelli and Pagano: instituto di Studi Economici, I.U.N., Italy. **SR** Centre for Economic Policy Research, Discussion Paper: 1108; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E21, O16. **KW** Saving. Liquidity Constraints. Welfare.

AB We analyze the welfare implications of liquidity constraints for households in an overlapping generations model with growth. In a closed economy with exogenous technical progress, liquidity constraints reduce welfare if the economy is dynamically inefficient. But if it is dynamically efficient, some degree of financial repression is optimal in the steady state, even though it hurts some generations in the transition. In an open economy with capital mobility, financial repression of domestic households is never optimal at the national level; but generalized capital mobility leads to an inefficiently low steady-state supply of saving at the world level. With endogenous technical progress, financial repression may increase welfare even along the transition path, thus leading to a Pareto improvement. In this case, the optimal degree of financial repression increases as the economy grows.

PD March 1995. **TI** Testing for Liquidity Constraints in Euler Equations with Complementary Data Sources. **AU** Jappelli, Tullio; Pischke, Jorn-Steffen; Souleles, Nicholas. **AA** Jappelli: Institute Universitario Navale, Italy. Pischke and Souleles: MIT. **SR** Centre for Economic Policy Research, Discussion Paper: 1138; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 32. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E21, E27. **KW** Liquidity Constraints. Euler Equation. Switching Regression.

AB Previous tests for liquidity constraints using consumption Euler equations have frequently used asset-based sample separation rules, arguing that low wealth consumers are more likely to be constrained. We propose an alternative sample separation rule using direct information on borrowing constraints provided in the US Survey of Consumer Finances. We estimate probabilities of being liquidity constrained which are then used in a second sample, the Panel Study of Income Dynamics, to estimate a switching regression model for the Euler equation. The estimates indicate that the conditional mean of consumption growth is not strongly affected by the probability of liquidity constraints. Quantile regressions suggest that liquidity constraints affect the conditional distribution of consumption in the constrained and unconstrained regimes in a way consistent with theoretical simulations, however. We interpret these findings as weak evidence that liquidity constraints affect the intertemporal allocation of food consumption.

Jarvis, Sarah

PD January 1995. **TI** Redistributive Policy in a Transition Economy: The Case of Hungary. **AU** Jarvis, Sarah; Pudney, Stephen. **AA** Jarvis: University of Cambridge. Pudney: University of Leicester. **SR** Centre for Economic Policy Research, Discussion Paper: 1117; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 47. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D31, J31, P24. **KW** Hungary. Economic Transition. Redistribution.

AB This study examines the scope for redistributive government policies based on progressive income taxation and direct income transfers. We concentrate on the case of Hungary. We first survey recent developments in the economic circumstances of the household sector and changes in the Hungarian tax benefit system. We then examine the changing redistributive role of the personal income tax system. Finally, we consider the redistributive potential for various types of income transfer, using optimal targeting techniques. The analysis is based on data from the 1991 Hungarian Household Budget Survey.

Johnson, William R.

TI The Role of Pre-Market Factors in Black-White Wage Differences. **AU** Neal, Derek A.; Johnson, William R.

Judge, George

TI Estimating the Size Distribution of Firms Using Government Summary Statistics. **AU** Golan, Amos; Judge, George; Perloff, Jeffrey M.

Kahneman, Michael

PD August 1995. **TI** A Model of Bargaining Between Delegates. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 25/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 26. **PR** no charge. **JE** C78, L14. **KW** Bargaining. Delegation.

AB This paper presents a model of bargaining through delegation. Each one of two principals engages a delegate who bargains on his behalf. Bargaining is conducted according to the Rubinstein bargaining model, and each delegate's salary is determined by a contingent wage schedule. It is shown that if the delegates are allowed to form binding contracts, then they jointly receive the whole pie in any subgame-perfect equilibrium. For this purpose, a generalization of the Rubinstein bargaining model to general sequences is stated and proved.

Kallapur, Sanjay

TI The Effects of Cross-Sectional Scale Differences on Registration Results in Empirical Accounting Research. **AU** Barth, Mary E.; Kallapur, Sanjay.

Kamin, Steven B.

TI Bank Lending and Economic Activity in Japan: Did "Financial Factors" Contribute to the Recent Downturn? **AU** Brunner, Allan D.; Kamin, Steven B.

PD February 1996. **TI** Monetary Policy in the End-Game to Exchange-Rate Based Stabilizations: The Case of Mexico. **AU** Kamin, Steven B.; Rogers, John H. **AA** Board of Governors of the Federal Reserve System. **SR** Board of

Governors of the Federal Reserve System, International Finance Discussion Papers: 540; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 24. **PR** no charge. **JE** E63, F31, O54. **KW** Exchange Rates. Mexico. Stabilization.

AB Exchange-rate based stabilizations, while useful in accelerating the disinflation process, typically lead to overvalued exchange rates and large current account deficits. These factors, in turn, make it difficult to sustain exchange rate pegs, placing heavy demands upon monetary policy to sustain exchange-rates based programs in their later phases. This paper evaluates the extent to which Mexican monetary policy in 1994 may have loosened, or not tightened sufficiently, in the lead up to the devaluation of the peso that December. Using econometric models of the demand for money, we find evidence that the high growth of the monetary base in 1994 reflected strong positive shocks to the demand for money, not to its supply. Next, we estimate a monetary policy reaction function for Mexico. Based on this estimate, we argue that interest rates rose only moderately less in 1994, in response to downward pressure on the peso and on international reserves, than was predicted by the authorities' reaction function. This result is qualified somewhat by our finding that if interest rates are modeled as reacting to reserves net of Tesobonos, rather than gross reserves, the measured deviation of actual from predicted interested rates would have been much greater. However, the relative complacency with which both the authorities and the market viewed the build-up in Tesobonos, at least until late in 1994, suggest that the reaction function based on net reserves probably does not capture "normal" monetary policy behavior. Our findings suggests that in order to have maintained the peg, the authorities would have needed to intensify their response to exchange market developments -- that is, to alter their reaction function -- at a time when concerns over the health of the banking sector, and of the economy more generally, would have pointed to a relaxation of monetary policy. Insofar as such tightenings of monetary reaction functions are difficult to achieve, Mexico's experience suggests that policymakers relying on the exchange rate as a nominal anchor probably should be prepared either to abandon that anchor or tighten monetary policy well before speculative pressures intensify.

Kaminsky, Graciela L.

PD March 1996. **TI** High Real Interest Rates in the Aftermath of Disinflation: Is It Lack of Credibility? **AU** Kaminsky, Graciela L.; Leiderman, Leonardo. **AA** Kaminsky: Board of Governors of the Federal Reserve System. Leiderman: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 8/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 18. **PR** no charge. **JE** E43, E52, E63. **KW** Disinflation. Credibility. Inflation. Expectations. Regime Change. Interest.

AB See Graciela L. Kaminsky and Leonardo Leiderman, "High Real Interest Rates in the Aftermath of Disinflation: Is it Lack of Credibility?", Board of Governors of the Federal Reserve System. International Division of Finance Discusssion Paper: 543, March 1996.

PD March 1996. **TI** High Real Interest Rates in the Aftermath of Disinflation: Is it a Lack of Credibility? **AU** Kaminsky, Graciela L.; Leiderman, Leonardo. **AA** Kaminsky: Board of Governors of the Federal Reserve System. Leiderman: Tel-Aviv University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 543; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 27. **PR** no charge. **JE** E43, E52, F31. **KW** Credibility. Interest Rates. Disinflation.

AB High real interest rates have been observed in many countries for several months after the adoption of disinflation programs. While they may reflect primarily a liquidity crunch, high ex post real interest rates can also be explained in terms of an ex post error in inflation expectations that reflects a lack of credibility of the low-inflation policy. The latter hypothesis is tested using data for Argentina, Israel, and Mexico during the implementation of the stabilization programs in the mid-1980s.

PD March 1996. **TI** The Twin Crises: The Causes of Banking and Balance-of-Payments Problems. **AU** Kaminsky, Graciela L.; Reinhart, Carmen M. **AA** Kaminsky: Board of Governors of the Federal Reserve System. Reinhart: International Monetary Fund. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 544; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 26. **PR** no charge. **JE** F32, F34, G21. **KW** Banking. Balance of Payments.

AB In the wake of the ERM and Mexican currency crises, the subject of balance-of-payments crises has come to the forefront of academic and policy discussions. This paper focuses on the potential links between banking and balance-of-payments crises. We examine these episodes for a large number of countries and find that: knowing that there are banking problems helps in predicting a balance-of-payments crises, but the converse is not true; financial liberalization usually predates banking crises, indeed, it helps predict them. Rather than a causal relationship from banking to balance-of-payments crises, the macroeconomic "stylized facts" that characterized these episodes point to common causes.

Kane, Thomas J.

PD July 1995. **TI** Rising Public College Tuition and College Entry: How Well Do Public Subsidies Promote Access to College? **AA** The Brookings Institution and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5164; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** $5.00. **JE** I28. **KW** College Accessibility. Government Programs. Means-Tested Aid. Youth.

AB Though economists have spent the past decade analyzing the rising payoff to schooling, we know much less about the responses of youth or the effectiveness of policies aimed at influencing those decisions. States and the federal government currently spend more than $53 billion annually, hoping to promote greater access to college. This paper evaluates the price sensitivity of youth, using several sources of non-experimental variation in costs. The bulk of the evidence points to large enrollment impacts, particularly for low-income students and for those attending two-year colleges. The states have chosen to promote college enrollment by keeping tuition low through across-the-board subsidies rather than using more targeted, means-tested aid. As public enrollments increase, this has become an expensive strategy. Means- tested aid is much weaker. After a federal means-tested grant program was established in 1973, there was no disproportionate increase in enrollment by low-income youth. Given the number of public dollars at stake, the two sets of results should be reconciled.

Kang, Jun-Koo

PD July 1995. **TI** Why is there a Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan. **AU** Kang, Jun-Koo; Stulz, Rene M. **AA** Kang: University of California, Riverside. Stulz: Ohio State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5166; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 43. **PR** $5.00. **JE** F21, G11, G15. **KW** Foreign Stock. Home Bias. Portfolio Formation.

AB This paper uses data on foreign stock ownership in Japan from 1975 to 1991 to examine the determinants of the home bias in portfolio holdings. Existing models of international portfolio choice predicting that foreign investors hold national market portfolios or portfolios tilted towards high expected return stocks are inconsistent with the evidence provided in this paper. We document that foreign investors overweight shares of firms in manufacturing industries, large firms, firms with good accounting performance, firms with low unsystematic risk, and firms with low leverage. Controlling for size, there is evidence that small firms that export more have greater foreign ownership. Foreign investors do not perform significantly worse than if they held the Japanese market portfolio, however. After controlling for firm size, there is no evidence that foreign ownership is related to expected returns of shares. We show that a model with size-based information asymmetries and deadweight costs can yield asset allocations consistent with our evidence.

Karni, Edi

TI Unemployment Insurance: Endogenous Adverse Selection, Delayed-Start Policies and the Role of the Public Sector. **AU** Chiu, W. Henry; Karni, Edi.

PD January 1995. **TI** Social Welfare Function and Fairness. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 340; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 10. **PR** no charge. **JE** D63, D71, D61. **KW** Social Welfare. Fairness. Equity. Justice.

AB A definition of social state is proposed that incorporates the notion of procedural fairness into Harsanyi's (1955) analytical framework. We show that, within the new framework, a Harsanyi-type social welfare function is immune to Diamond's (1967) criticism. Moreover, the resulting social welfare function embodies the notion of procedural fairness held by individual members of the society.

PD April 1995. **TI** Knowledge of Justice. **AU** Karni, Edi; Schmeidler, David. **AA** Karni: Johns Hopkins University. Schmeidler: Tel Aviv University and Ohio State University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 346; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 7. **PR** no charge. **JE** D62, D73. **KW** Justice. Fairness. Common Knowledge.

AB In the paper we examine the implications of the view that knowledge of justice is an inherent feature of justice, whether distributive or procedural. In particular, we discuss two interpretations of the meaning of knowledge of justice: (a) A procedure is just only if it is known by everyone involved whenever it is used and (b) a procedure is just only if it is known to be just by everyone involved. We show that knowledge of justice in either meaning implies common knowledge of justice.

PD July 1995. **TI** Probabilities and Beliefs. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 348; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 16. **PR** no charge. **JE** D81, D84, D11. **KW** Subjective Probabilities. Beliefs.

AB Choice-theoretic definitions of subjective probabilities originated with the work of Ramsey and de Finetti and attained their definitive form in the work of Savage. These probabilities are intended to provide a numerical representation of decision-maker's beliefs regarding the likely realization of alternative events. In this paper I argue that, the choice-theoretic definitions of subjective probabilities involve a tacit convention - namely, state-independent utility functions - that is not implied by the axioms, and as a consequence choice-theoretic subjective probabilities, even when they exist do not necessarily represent the decision-maker's beliefs.

PD November 1995. **TI** Individual Sense of Justice and Social Welfare Functions. **AU** Karni, Edi; Safra, Zvi. **AA** Safra: Tel Aviv University. Karni: Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 354; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 21. **PR** no charge. **JE** D63, D64, D71. **KW** Justice. Fairness. Social Welfare.

AB This paper contains two main results: (a) An axiomatic model and a representation theorem characterizing self-interest seeking moral individuals. (B) An extension of Harsanyi's axiomatic treatment of social welfare functions to individuals whose preferences do not necessarily obey the axioms of expected utility theory. Combining the two results the paper presents a social choice theory based on the maximization of social welfare function. This theory is immune to the well-known criticism of Harsanyi's work.

TI An Informationally Parsimonious Impartial Observer Theorem. **AU** Weymark, John A.; Karni, Edi.

Karp, Larry S.

PD October 1994. **TI** The Optimal Suppression of a Low-Cost Technology by a Durable Goods Monopoly. **AU** Karp, Larry S.; Perloff, Jeffrey M. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 733R; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 49. **PR** $12.25 Domestic; $24.50 International Surface Rate. **JE** L12, O33. **KW** Low Cost. Technology. Durable Good. Monopoly.

AB If a durable-good monopoly can use either of two technologies whose properties are known to consumers, the monopoly uses only the technology with the lowest average cost at low levels of production. If consumers only know about technologies in use, the monopoly may use an inferior technology initially to increase its profits, keeping the new, efficient technology secret and switching later. Thus, in either case, an inferior technology may be used; however, switching between technologies occurs only if consumers are not fully informed about both technologies.

PD January 1995. **TI** Labor Adjustment and Gradual Reform: Is Commitment Important? **AU** Karp, Larry S.; Paul, Thierry. **AA** Karp: University of California, Berkeley. Paul: LEQAM, France. **SR** Centre for Economic Policy Research, Discussion Paper: 1094; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 37. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, J24. **KW** Adjustment Costs. Dynamic Tariffs. Time Inconsistency. Markov Perfection.

AB We analyze a model in which a government uses a second-best policy to affect the reallocation of labor following a change in relative prices. We consider two extreme cases in which the government has either unlimited or negligible ability to commit to future actions. We explain why the ability to make commitments may be unimportant, and we illustrate this conjecture with numerical examples. For either assumption about commitment ability, the equilibrium policy involves gradual liberalization. The dying sector is protected during the transition to a free market, in order to decrease the amount of unemployment. Our results are sensitive to the assumptions about migration.

PD March 1995. **TI** Monopoly Power Can Be Disadvantageous in the Extraction of a Durable Nonrenewable Resource. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 732R; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 45. **PR** $11.25 Domestic; $22.50 International Surface Rate. **JE** D42, L12, Q31. **KW** Market Power. Durable Good. Nonrenewable Resources. Coase Theorem.

AB We study a Markov equilibrium for the case where a monopolist extracts a nonrenewable resource which is converted to a durable good, which then depreciates at a constant rate. We show that in a stationary, continuous time model (infinite horizon, infinitesimal period of commitment) monopoly power can be disadvantageous. Numerical experiments confirm that this can also occur in a finite horizon, discrete model. This result is compared to previous examples of disadvantageous market power, obtained using two-period models.

PD March 1995. **TI** Vertically Related Markets and Trade Policy in a Bargaining Framework. **AU** Karp, Larry S.; Sioli, Lucy. **AA** Karp: University of California, Berkeley. Sioli: University of Southampton. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 745; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 62. **PR** $15.50 Domestic; $31.00 International Surface Rate. **JE** C71, C78, F13, L22. **KW** Multistage Bargaining. Vertical Integration. Trade Policy. Cooperative Games.

AB We analyze the interaction of asymmetric industries in international vertically related markets. Each downstream firm bargains efficiently with its domestic supplier in a first stage and with the foreign supplier in a second stage. The asymmetry in upstream costs leads to interindustry trade. It can also cause vertical integration in the more efficient industry, and possibly vertical foreclosure. The latter occurs if competition in the final goods market is severe (the goods are close substitutes). When the more efficient industry is integrated, a tariff on imports of the final good stimulates interindustry trade of the input, but it may increase or decrease the market share of the domestic upstream firm. The effects of a tariff depend on the industry configuration in the low-cost country.

PD March 1995. **TI** International Trade and the Internalization of Environmental Damages. **AU** Karp, Larry S.; Dumas, Chris; Koo, Bonwoo; Sacheti, Sandeep. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 746; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 134. **PR** $33.50 Domestic; $67.00 International Surface Rate. **JE** F13, Q18, F13. **KW** International Trade. Commercial Policy. Environmental Policy. Agricultural Policy.

AB This paper contributes to the growing effort to synthesize the fields of trade policy and environmental policy. We discuss: The question of whether international trade undercuts unilateral internalization policies; the role of income constraints in environmental policy; and the possibility of using trade policy to achieve environmental objectives. We review estimates of environmental damage in agricultural production and processing, and we summarize current policy measures. We use a static empirical model to estimate the effects of several internalization policies. We shown how a dynamic model can be used to simulate the effects of policy over time, for both environmental and economic variables.

PD March 1995. **TI** Prospects and Policy for Central and East European Agriculture. **AU** Karp, Larry S.; Stefanou, Spiro. **AA** Karp: University of California, Berkeley. Stefanou: Pennsylvania State University. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 747; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 72. **PR** $18.00 Domestic; $26.00 International Surface Rate. **JE** O21, Q18, F13. **KW** Central Europe. Eastern Europe. Agricultural Policy. Commercial Policy. Consumption.

AB To provide different perspectives of Central and East European (CEE) agriculture we have assembled statistics on production, consumption and trade. These, together with a review of policies prior to liberalization, provide a background for discussion of current policies and recommendations for a change in government emphasis. We also review attempts to estimate the effects on agriculture of recent and potential reforms.

TI Wetlands Mitigation Banks: A Developer's Investment Problem. **AU** Fernandez, Linda; Karp, Larry S.

PD July 1995. **TI** International Trade in Exhaustible Resources: A Cartel-Competitive Fringe Model. **AU** Karp, Larry S.; Tahvonen, Olli. **AA** Karp: University of California, Berkeley. Tahvonen: Academy of Finland. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 754; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 38. **PR** $9.50 Domestic; $19.00 International Surface Rate.

JE C73, C62, F12. **KW** International Trade. Exhaustible Resources. Cartels. Competition.
AB We characterize the open-loop and the Markov perfect Stackelberg equilibria for a differential game in which a cartel and a fringe extract a nonrenewable resource. Both agents have stock dependent costs. The comparison of initial market shares, across different equilibria, depends on which firm has the cost advantage. The cartel's steady state market share is largest in the open loop equilibrium and smallest in the competitive equilibrium. The initial price may be larger in the Markov equilibria, so a decrease in market power may make the equilibrium appear less competitive. The benefit to cartelization increases with market share.

PD July 1995. **TI** The Direction and Timing of Agricultural Trade Reform in Central and East Europe. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 755; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 33. **PR** $8.25 Domestic; $16.50 International Surface Rate. **JE** Q17, F14. **KW** International Trade. Agricultural Trade Reform. European Community. Central Europe. Eastern Europe.
AB Following a review of the recent history of Central European and East European (CEE) agricultural trade policy, this paper considers arguments for future trade policy changes. There are few tenets as widely shared within the economics profession as the desirability of liberal trade, and CEE has made great progress in moving toward such a regime. If there is (near) unanimity for a policy prescription, which is moreover (substantially) adopted, the value of further discussion on the point may appear questionable. However, CEE agricultural trade policy merits continued discussion for at least three reasons. The first concerns the stability of liberal trade in general, the second the special features of agricultural trade, and the third, the nature of the consensus, amongst economists, in favor of liberal trade.

PD March 1996. **TI** Limited Cooperation in International Environmental Agreements. **AU** Karp, Larry S.; Sacheti, Sandeep. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 763R; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 35. **PR** $8.75 Domestic; $17.50 International Surface Rate. **JE** F13, H21, L13, Q28. **KW** Environmental Policy. Limited Cooperation. Environmental Agreements. Strategic Complements.
AB Governments' desire to ameliorate environmental problems may conflict with other goals. Policy levels which balance different objectives can be altered by policy changes in other countries. A decrease in the importance of the pollution problem, or an increase in its global extent, increase the likelihood that tighter environmental regulations in one region induce laxer policies elsewhere. The transboundary character and the importance of environmental externalities also affect the amount of cooperation needed to improve members' welfare in a coalition. More global pollution problems require a larger coalition. However, the critical coalition size may be larger or smaller for more severe problems.

Keane, Michael

PD December 1994. **TI** A Structural Model of Multiple Welfare Program Participation and Labor Supply. **AU** Keane, Michael; Moffitt, Robert A. **AA** Keane: University of Minnesota. Moffitt: Brown University. **SR** Brown University, Department of Economics Working Paper: 95/4; Department of Economics, Brown University, Providence, RI 02912. **PG** 40. **PR** no charge. **JE** C35, I38, J22. **KW** Labor Supply. Welfare. Transfer Programs.
AB One of the long-standing issues in the literature on transfer programs for the U.S. low-income population concerns the high cumulative marginal tax rate on earnings induced by participation in the multiplicity of programs offered by the government. Empirical work on the issue has reached an impasse partly because the analytic solution to the choice problem is intractable and partly because the model requires the estimation of multiple sets of equations with limited dependent variables, an estimation problem which until recently has been computationally infeasible. In this paper we estimate a model of labor supply and multiple program participation using methods of simulation estimation that enable us to solve both problems. The results show asymmetric wage and tax rate effects, with fairly large wage elasticities of labor supply but very inelastic responses to moderate changes in cumulative marginal tax rates, implying that high welfare tax rates do not necessarily induce major reductions in work effort.

TI A Structural Model of Multiple Welfare Program Participation and Labor Supply. **AU** Moffitt, Robert A.; Keane, Michael.

Keeler, Andrew G.

TI Economic Analysis in Policy Evaluation, Damage Assessment and Compensation; A Comparison of Approaches. **AU** Hanemann, W. Michael; Keeler, Andrew G.

Khandker, Shahidur

TI The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter? **AU** Pitt, Mark M.; Khandker, Shahidur.

Kim, Michael

TI The Law of One Price Over 700 Years. **AU** Froot, Kenneth A.; Kim, Michael; Rogoff, Kenneth.

Kim, Minseong

TI Predation and Accumulation. **AU** Grossman, Herschel I.; Kim, Minseong.

TI Morality, Predation, and Welfare. **AU** Grossman, Herschel I.; Kim, Minseong.

Kim, Sang W.

PD February 1995. **TI** International Stock Price Spillovers and Market Liberalization: Evidence from Korea, Japan, and the United States. **AU** Kim, Sang W.; Rogers, John H. **AA** Kim: Pennsylvania State University. Rogers: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 499; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 23. **PR** no charge. **JE** G14, G15. **KW** Emerging Markets. Volatility Spillovers. Liberalization. GARCH.

AB In August 1991 the Korean government announced that the stock exchange would undergo a significant liberalization in January 1992, by allowing foreigners to directly own shares in Korean stocks. This paper examines the repercussions on the relationship between the stock markets of Korea, Japan, and the United States. We estimate generalized autoregressive conditional heteroskedasticity (GARCH) models to quantify the importance of "volatility spillovers" from Japan and the U.S. on the mean and variance of Korean returns. Such spillovers have increased since the announced opening, with most of the effect on the opening prices of the Korean stock market.

Kimball, Miles S.

TI On the Concavity of the Consumption Function. **AU** Carroll, Christopher D.; Kimball, Miles S.

Kleidon, Allan W.

PD September 1995. **TI** Effects of Geography and Stock-Market Structure: A Comparison of Cross-Listed Securities. **AU** Kleidon, Allan W.; Werner, Ingrid M. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1348; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 23. **PR** no charge. **JE** G12, G24, G14. **KW** Microstructure. Stocks. Asset Prices.

AB We analyze intraday patterns for patterns for a set of cross-listed securities in four markets: the London Stock Exchange (LSE), the NYSE, AMEX, and Nasdaq. Differences in intraday patterns are shown to extend across both geographical and structural boundaries. For example, Nasdaq inside spreads increase sharply immediately following the open. By contrast, inside spreads fall after the open on the floor exchanges (NYSE and AMEX) in our sample as well as on the second dealer market (LSE). We conclude that the incorporation of greater descriptive realism into theoretical models appears to be an essential step for conducting accurate empirical tests of competing theories, and to increasing an understanding of the functioning of these markets.

Klein, Michael W.

TI A Provincial View of Capital Mobility. **AU** Bayoumi, Tamim A.; Klein, Michael W.

Kletzer, Kenneth M.

TI Capital Mobility, Fiscal Policy and Growth Under Self-Financing of Human Capital Formation. **AU** Buiter, Willem H.; Kletzer, Kenneth M.

PD May 1995. **TI** Sovereign Debt As Intertemporal Barter. **AU** Kletzer, Kenneth M.; Wright, Brian D. **AA** Kletzer; University of California, Santa Cruz. Wright: University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 761; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 44. **PR** $11.00 Domestic; $22.00 International Surface Rate. **JE** D91, G21. **KW** Debt. Borrowing. Intertemporal Exchange. Banking.

AB Borrowing and lending between sovereign parties is modelled as intertemporal barter that smoothes the consumption of a risk-averse party subject to endowment shocks. The surplus anticipated in the relationship offers sufficient incentive for cooperation by all parties, including any other competitive lenders who may be potential entrants. The sole punishments consist of renegotiation-proof changes in the paths of future payments. This implicit long-term relationship may be fulfilled as the continual renegotiation of a simple, incomplete short- term debt contract with associated "debt overhang." The analysis suggests that the crucial role of the explicit contract is the identification of the parties to the relationship.

Koford, Kenneth

PD June 1995. **TI** Contracts in Bulgaria: How Firms Cope When Property Rights are Incomplete. **AU** Koford, Kenneth; Miller, Jeffrey B. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/04; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 54. **PR** not available. **JE** P21, K11. **KW** Bulgaria. Property Rights.

AB How are contracts among firms enforced in an economy in transition? Such economies are largely without a recent history of private rights or of government enforcement of commercial contracts. We examine this question through a sample of Bulgarian firms, for which we conducted personal interviews. Firms were largely in the food processing and distribution industry, and included private, state-owned and cooperative firms. All firms tried to work closely with trustworthy counterparts, and were very cautious about firms that might take advantage of them. We were surprised to find that even basically spot-market contracts had a considerable number of contractual problems. Failure to pay was very common, while failure to deliver and quality problems occurred with suppliers. Firms engaged in a surprising amount of litigation, although they did not expect lawsuits would be very effective. As a result, complex contracts were quite limited. In some cases, this led to the breakdown of important markets. The study follows in the tradition of Coase (1960), Williamson (1975, 1985), and Klein, Crawford and Alchian (1978) in focusing on transactional relationships to understand how economic activity is being organized. Following Macauley (1963) and Ellickson (1991), it was our expectation that there would be little litigation. The opposite was the case.

PD September 1995. **TI** A Competitive Equilibrium Model of Legislatures. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/09; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 56. **PR** not available. **JE** D72, C62, H41. **KW** Political Economy. Voting. Public Goods.

AB When political leaders compete in a multidimensional issue space to pass or defeat bills, the setting resembles a contestable market. This paper examines the equilibrium contracts and outcomes that result from such competition. The leaders promise to assure particular outcomes in exchange for support and votes. There is a non-dimensional private good in addition to the public goods of the multidimensional issue spaces; exchange between private and public goods induces legislator demands for public goods. The contestable equilibrium in the multidimensional issue space is the highest net demand location. Under some demand conditions that is the generalized median--the equilibrium of previous models (Plott

1967). However, when demand gradients vary in intensity, the highest-demand outcomes diverges from the median in the direction of the intense gradients. Thus, while most previous models of legislative equilibrium valued only numbers of legislators, this model values demand, weighting numbers by intensity of preference. The model's comparative statics are developed; they are analogous to those of the Becker (1983) interest group model and to public-goods demand theory.

TI The Effect of Incomes Policies on Inflation in Bulgaria and Poland. **AU** Enev, Tihomir; Koford, Kenneth.

Kontolemis, Zenon G.

TI Classical Business Cycles for G7 and European Countries. **AU** Artis, Michael J.; Kontolemis, Zenon G.; Osborn, Denise R.

Koo, Bonwoo

TI International Trade and the Internalization of Environmental Damages. **AU** Karp, Larry S.; Dumas, Chris; Koo, Bonwoo; Sacheti, Sandeep.

Kostoris, Fiorella Padoa Schioppa

PD November 1994. **TI** Excesses and Limits of the Public Sector in the Italian Economy. The Ongoing Reform. **AA** ISPE. **SR** Centre for Economic Policy Research, Discussion Paper: 1053; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 19. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** H20, H40, H50, L60. **KW** Subsidies. Budget. Deficit. Debt. Regulation.

AB This paper provides factual evidence on the extent of public intervention in the Italian economy. It further illustrates the internal contradictions and weaknesses of public action in Italy. New policy proposals to solve old structural problems of the Bel Paese are then discussed. Among them, a major privatization program decided since 1992 is analyzed together with drastic budgetary cuts aiming at curbing public debt to maintain sustainability. Finally, the paper tries to explain why, in spite of all the excesses and limits of the policy- making, the performance of the Italian economy is apparently quite brilliant. The conclusion is that Italian society is already doing de facto what I suggest in the text that the Government should allow it to do, primarily by introducing deregulation and flexibility in economic matters. Italy is achieving these goals through the underground economy, by evading taxes and union rules in small private enterprises, but it is largely failing to do so in larger companies and in the public sector. In short, the country is developing thanks to what the Italians call "l'arte d'arrangiarsi", their generalized talent for improvisation, thus providing living proof that deregulation and flexibility work.

Kraay, Aart

TI Spatial Correlations in Panel Data. **AU** Driscoll, John; Kraay, Aart.

Krishna, Pravin

PD March 1996. **TI** Regionalism and Multilaterialism: A Political Economy Approach. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 96/5; Department of Economics, Brown University, Providence, RI 02912. **PG** 25. **PR** no charge. **JE** F12, F13, F15. **KW** Trade Agreements. Political Economy. Multilaterialism. International Trade.

AB This paper examines the impact of Free Trade Areas (FTAs) on the incentives for multilateral liberalization and challenges the contention that Free Trade Areas are superior to GATT style (multilateral) trade liberalization as a way of getting to multilateral free trade for all. Using a model of imperfect competition in segmented markets, preferential trading arrangements are analyzed from the viewpoint of the "new political economy" which views trade policy as being determined by lobbying by concentrated interest groups. Within this framework, the paper reaches two conclusions: First, that preferential arrangements which divert trade away from the rest of the world are more likely to be supported politically, and second, that such preferential arrangements will reduce the domestic incentives for multilateral liberalization. It is also argued that in some cases this reduction in incentives could be critical: Multilateral liberalization that is initially feasible could be rendered infeasible by preferential arrangements. The larger the trade diversion resulting from the preferential arrangement, the more likely this will be the case.

PD March 1996. **TI** On the Choice of Instrument: Voluntary Import Expansions (VIEs) vs. Voluntary Export Restraints (VERs). **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 96/6; Department of Economics, Brown University, Providence, RI 02912. **PG** 19. **PR** no charge. **JE** F12, F13. **KW** Managed Trade. Export Restraints. Import Expansions. Trade Policy.

AB This paper examines the choice of whether a Voluntary Export Restraint (VER) or a Voluntary Import Expansion (VIE) should be used in order for the home country to achieve a specified trade objective (say a targeted increase in the net exports of a specified good). If these instruments are applied on a market share basis, it would be the case, in general, that a VER that (by restricting imports) is used to achieve this trade objective, would need to be set at a different level than a VIE that (by expanding exports instead) is used to achieve the same objective. However, using a model of imperfect competition in segmented markets, it is shown that both VERs and VIEs, independently of the level at which they are set, induce monopoly outcomes thereby reducing output and raising prices in the market in which they are applied. From a world welfare point of view, the implication is that it is better to apply that instrument that would act on the smaller market, since the distortion loss due to the monopoly outcome would then be smaller. In other words, if the home market is larger than the foreign market, VIEs should be the preferred instrument. If the home market is smaller than the foreign market, VERs should be used instead. From the home country's point of view, VIEs can be shown to always dominate VERs since in contrast to VERs, they do not reduce home country consumption of the good and consequently involve no loss in domestic consumer surplus.

Lancaster, Tony

PD January 1995. **TI** Exact Structural Inference in Optimal Job Search Models. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/3; Department of Economics, Brown University, Providence, RI 02912. **PG** 35. **PR** no charge. **JE** C11, C15, C41. **KW** Search. Bayes. Structural Inference. Duration.

AB This paper is a study of the exact posterior distributions of parameters appearing in a stationary optimal job search model. I exploit the simple latent structure of the search model when all job offers are observed to simulate posterior distributions of structural parameters when the latent structure is imperfectly observed. These simulations enable me to show the exact, and unusual, shape of the job search likelihood when the data are durations and accepted wages. I also develop an algorithm to resample simulated posterior distributions in order to impose on the model the implications of fully optimal, utility maximizing, search. This algorithm may be applicable to a wider class of dynamic structural discrete choice models. The methods are illustrated using simulated data.

PD November 1995. **TI** Panel Data with Survival: Hospitalization of HIV Patients. **AU** Lancaster, Tony; Intrator, Orna. **AA** Lancaster: Brown University. Intrator: Hebrew University of Jerusalem and Brown University. **SR** Brown University, Department of Economics Working Paper: 95/36; Department of Economics, Brown University, Providence, RI 02912. **PG** 19. **PR** no charge. **JE** C33, C41. **KW** Survival Function. Panel Data. Frailty Models. Endogenous Covariates.
AB This paper provides an analysis of the hospitalization experience of a panel of HIV positive patients. It is part of a program of work designed to study the medical expenditures of such patients and their variation both between people and over time. We model the joint distribution of the inpatient episodes and the survival times of a panel of patients over 15 months. The model induces correlation between hospitalization and death via an unmeasured, person specific, frailty term. And it allows rates of hospitalization and of death each to be affected by time invariant and time varying covariates. We subject the model to a variety of predictive tests and show that it is generally consistent with the data. We study and present estimates of the time variation in the rate of hospitalization. We also report the effects of a large number of covariates on rates of hospitalization and morality. The model generalizes fairly easily in a number of ways, one of which is to handle vector valued measures of medical expenditure and of other outcomes, such as the employment record, associated with the illness and evolving through time. Our model therefore points towards a general solution to the problem of analyzing panel data in which the outcome variables of interest are correlated with the rate of mortality.

Landsman, Wayne R.

TI Value-Relevance of Bank's Fair Value Disclosures under SFAS 107. **AU** Barth, Mary E.; Beaver, William H.; Landsman, Wayne R.

TI Fundamental Issues Related to Using Fair Value Accounting for Financial Reporting. **AU** Barth, Mary E.; Landsman, Wayne R.

TI Accounting for Financial Instruments: An Option Pricing-based Approach to Measuring Corporate Debt Components. **AU** Barth, Mary E.; Landsman, Wayne R.; Rendleman, Richard J.

Lane, Julia

TI Job Flows, Worker Flows and Churning. **AU** Burgess, Simon; Lane, Julia; Stevens, David.

Lane, Sylvia

TI Young Children's Egg Consumption: Determinants and Policy Implications. **AU** Ralston, Katherine; Lane, Sylvia.

Lang, Larry

PD July 1995. **TI** Leverage, Investment, and Firm Growth. **AU** Lang, Larry; Ofek, Eli; Stulz, Rene M. **AA** Lang: Chinese University of Hong Kong. Ofek: New York University. Stulz: Ohio State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5165; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $5.00. **JE** E22, G32. **KW** Leverage. Investment. Firm Growth. Tobin's q.
AB We show that there is a negative relation between leverage and future growth at the firm level and, for diversified firms, at the segment level. Further, this negative relation between leverage and growth holds for firms with low Tobin's q, but not for high-q firms or firms in high- q industries. Therefore, leverage does not reduce growth for firms known to have good investment opportunities, but is negatively related to growth for firms whose growth opportunities are either not recognized by the capital markets or are not sufficiently valuable to overcome the effects of their debt overhang.

Lang, William W.

TI Recovering Technologies That Account for Generalized Managerial Preferences: An Application to Non-Risk-Neutral Banks. **AU** Hughes, Joseph; Lang, William W.; Mester, Loretta J.; Moon, Choon-Geol.

TI New Directions in Information and Screening in Real Estate Finance. **AU** Nakamura, Leonard I.; Lang, William W.

Lariviere, Martin A.

PD December 1995. **TI** Manufacturer-Retailer Contracting Under a Unknown Demand Distribution. **AU** Lariviere, Martin A.; Porteus, Evan L. **AA** Lariviere: Duke University. Porteus: Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1368.; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 23. **PR** no charge. **JE** D83, D84, D43. **KW** Demand Estimation. Wholesale. Uncertainty.
AB We consider a manufacturer introducing a new product into a distribution channel and examine what wholesale price should be charged. The setting in many ways is simple. The channel is abbreviated with the manufacturer selling directly to the retailer. The contract is also simple, merely a flat wholesale price. Demand is stochastic but independent and identically distributed in each period. Complications arise from two additional assumptions. First, neither party knows some parameter of the demand distribution. The system evolves informationally as the channel has more experience with, and information about, the product. Second, we assume unmet demand is both lost and unobserved, so only sales data are available. The autonomous retailer's stocking level consequently dictates the rate at which the channel acquires information. The manufacturer's pricing policy, in turn, influences the retailer's actions. We explore how the wholesale price evolves as beliefs are updated in a Bayesian fashion. Pricing is driven by the precision of information and not the size of the market. In particular, we show that the manufacturer charges a lower price following a stockout than after an exact observation. That is, she prices more aggressively following a signal of relatively weak demand (unsold stock) than after a signal of strong demand (empty shelves). The apparent anomaly is explained by relating the precision of information to

the number of observed stockouts and the elasticity of retailer orders to the precision of information; stockouts are less informative, and an uncertain retailer is relatively price sensitive.

Leamer, Edward E.

PD May 1995. **TI** A Heckscher-Ohlin View of Sweden Competing in the Global Marketplace. **AU** Leamer, Edward E.; Lundborg, Per. **AA** Leamer: University of California, Los Angeles and National Bureau of Economic Research. Lundborg: The Industrial Institute of Economic and Social Research, Sweden. **SR** National Bureau of Economic Research, Working Paper: 5114; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** $5.00. **JE** F13, F14, F15, F41, J31. **KW** Wages. Global Marketplace. Investment. Heckscher-Ohlin Model. Welfare State.

AB In this paper we explore the hypothesis that the Swedish malaise comes from the "interaction" of the Swedish welfare state with changes in the global marketplace. External commerce can expose Swedish workers in exporting and import-competing industries to a kind of competition from low-wage foreign workers that is incompatible with an extensive welfare system. Incompatibilities between the external marketplace and the welfare state can be amplified over time if the welfare system discourages investments in human and physical capital thus causing a shift in the product mix toward more labor-intensive goods that are produced outside the Swedish borders by lower-wage workers. The Heckscher-Ohlin theory that is the theoretical foundation of this paper allows a high-wage equilibrium without government intervention even though there is increasing competition from low-wage suppliers, if capital is abundant and if production is concentrated on the most capital intensive products. Then the unskilled workers can be employed at high wages either in the tradables sector or the nontradables sector. On the contrary, however, Swedish investment rates have not been high enough to maintain the unique position that it had a couple of decades ago. This we express in the form of the Heckscher-Ohlin Crowding Hypothesis: Swedish difficulties in its interactions with the international marketplace come from an eroding lead in capital abundance. Though losing its distinctiveness in capital abundance, Sweden remains unusually well supplied with soft-wood forests. These forest resources can be a mixed blessing. Although contributing substantially to Gross Domestic Product, forest resources can also imply lower wages for unskilled workers and consequently greater income inequality. A country with abundant forest resources and also very abundant capital can produce capital intensive manufactures in addition to pulp and paper and end up with a mix of tradables that includes some relatively labor-intensive products. This product mix may dictate relatively low wages for unskilled workers since the marginal unskilled worker may be employed in sectors which globally award low wages.

Leiderman, Leonardo

TI High Real Interest Rates in the Aftermath of Disinflation: Is It Lack of Credibility? **AU** Kaminsky, Graciela L.; Leiderman, Leonardo.

TI High Real Interest Rates in the Aftermath of Disinflation: Is it a Lack of Credibility? **AU** Kaminsky, Graciela L.; Leiderman, Leonardo.

PD June 1996. **TI** Searching for Nominal Anchors in Shock-Prone Economies in the 1990s: Inflation Targets and Exchange Rate Bands. **AU** Leiderman, Leonardo; Bufman, Gil. **AA** Leiderman: Tel Aviv University. Bufman: Private economic consultant. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 16/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 45. **PR** no charge. **JE** E42, E44, F31, F33, F41. **KW** Nominal Anchors. Inflation Targets. Exchange Rate. Monetary Policy.

AB In recent years there has been a growing trend towards increased flexibility of exchange rate regimes. At the same time a decreasing number of countries are using monetary aggregates as intermediate targets for monetary policy. Taken together, these developments have prompted the need for various countries to choose nominal anchors other than a fixed exchange rate or monetary aggregate target. Two such choices for nominal anchors have been observed recently: (i) the adoption of crawling exchange rate bands (as in Chile, Colombia and Israel), and (ii) the adoption of explicit inflation targets (as in the United Kingdom, Canada, New Zealand and Sweden). In view of the increasing policy shift towards these two regimes, the main purpose of this paper is to document and analyze various countries' recent experiences with both these regimes and to produce a set of "stylized facts" which could serve as the basis for future analytical work on these issues.

Levin, Andrew T.

TI Inferences from Parametric and Non-Parametric Covariance Matrix Estimation Procedures. **AU** Den Haan, Wouter J.; Levin, Andrew T.

Levine, Paul

TI Can Delegation Be Counterproductive? The Choice of "Conservative" Bankers in Open Economies. **AU** Currie, David; Levine, Paul; Pearlman, Joseph.

Levitt, Steven D.

PD May 1995. **TI** The Effect of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Litigation. **AA** Harvard Society of Fellows and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5119; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** C51, H41, K14. **KW** Instrumental Variables. Prison Overcrowding. Crime Rate. Litigation.

AB Previous studies of the impact of changes in prisoner populations on crime rates have failed to adequately control for the simultaneity between those two variables. While increases in the number of prisoners are likely to reduce crime, rising crime rates also translate into larger prison populations. To break that simultaneity, this paper uses the status of prison overcrowding litigation in a state as an instrument for changes in the prison population. Overcrowding litigation is demonstrated to have a negative impact on prison populations, but is unlikely to be related to fluctuations in the crime rate, except through its effect on prison populations. Instrumenting results in estimates of the elasticity of crime with respect to the number of prisoners that are two to three times greater than previous studies. The results are robust across all of the crime categories examined. For each one-prisoner reduction induced by prison overcrowding litigation, the total number of crimes committed increases by approximately 15 per year. The social benefit from eliminating those 15 crimes is approximately $45,000; the annual per prisoner costs of incarceration are roughly $30,000.

Levy, Frank

TI Are Lots of College Graduates taking High School Jobs? A reconsideration of the Evidence. **AU** Tyler, John; Murnane, Richard J.; Levy, Frank.

Lewis, Kenneth A.

PD December 1995. **TI** The Japan-U.S. Math Score Gap: Quartiles, Top 10 Percent, and Top 5 Percent. **AU** Lewis, Kenneth A.; Seidman, Laurence S. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/12; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 6. **PR** not available. **JE** I21, C14, C21. **KW** Math. Tests. Japan.

AB It is shown that the Japan-U.S. mean score gap by thirteen-year-olds on the 1982 IEA mathematics exam is due to a gap at all cohort ranks-- each quartile, the top 10 percent, and the top 5 percent--in all subjects (except arithmetic and descriptive statistics at the top). The best Japanese math students do better than the best U.S. math students. It is not the case that the mean score gap is due solely to the poor performance by the bottom U.S. students. The gap holds in algebra and geometry even for the top cohorts that contain the very best students that were tested. These results were obtained by using the IEA student tapes for the U.S. and for Japan to compute individual student scores. These results may have important implications for the differential economic performance of Japan, the U.S., and other nations.

TI Housing Under a Personal Consumption Tax. **AU** Seidman, Laurence S.; Lewis, Kenneth A.

TI Transitional Protection During Conversion to a Personal Consumption Tax. **AU** Seidman, Laurence S.; Lewis, Kenneth A.

PD December 1995. **TI** An Optimal Greenhouse Tax in an Optimal Growth Model. **AU** Lewis, Kenneth A.; Seidman, Laurence S. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/15; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 15. **PR** not available. **JE** H21, Q25, Q28, O41. **KW** Greenhouse Effect. Taxation. Global Warming.

AB We investigate global warming in an optimal growth framework by adapting Nordhaus's DICE model, performing sensitivity analysis not included in his monograph. Using an optimal control program, we find the time paths of the greenhouse gas (GHG) emissions control rate and the saving rate that maximize a welfare function for empirically plausible parameter values; and the path of the greenhouse gas emissions tax that would induce profit-maximizing firms to generate the optimal emissions control rate path. We investigate the sensitivity of optimal policy to a wide range of economic issues. We calculate optimal paths for alternative preferences of a citizen planner, projections of technical progress, and estimates of abatement cost and temperature damage. We find that optimal policy depends critically on the economics, not just the science, of global warming.

PD January 1996. **TI** Conversion To a Consumption Tax, Heterogeneity, and Aggregate Saving. **AU** Lewis, Kenneth A.; Seidman, Laurence S. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 96/1; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 14. **PR** not available. **JE** H21, H24, H25, E21. **KW** Consumption Tax. Saving. Marginal Propensity.

AB It has been recognized that conversion of an income tax to a consumption tax can increase aggregate saving even if each household maintains a constant propensity to save. The reason is heterogeneity: the variation in the propensity to save among households, particularly the affluent. Using a widely cited data set, we find that such heterogeneity can lead to a substantial increase in aggregate saving under conversion to a consumption tax. We also find that, surprisingly, conversion to a progressive consumption tax may increase aggregate saving more than conversion to a flat consumption tax.

Li, Hao

TI Complexity and Network in Repeated Games: Linear Strategies. **AU** Cho, In-Koo; Li, Hao.

Liang, Nellie

TI The Economics of the Private Equity Market. **AU** Fenn, George W.; Liang, Nellie; Prowse, Stephen.

Liebman, Jeffrey B.

TI Labor Supply Response to the Earned Income Tax Credit. **AU** Eissa, Nada; Liebman, Jeffrey B.

Lillard, Lee A.

PD March 1996. **TI** Uncertain Health and Survival: Effects on End-of-Life Consumption. **AU** Lillard, Lee A.; Weiss, Yoram. **AA** Lillard: The Rand Corporation. Weiss: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 7/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 27. **PR** no charge. **JE** J14, J26, I11, D11. **KW** Health. Saving. Uncertainty.

AB The paper analyses the impact of health and survival uncertainty on the saving and consumption decisions of retirees. A dynamic programming approach is used to model the household's planning problem. The utility parameters are estimated using panel data. We find that a fall into poor health raises the marginal utility from consumption. Simulations are used to indicate the effects of falling into poor health and loss of spouse. They reveal a large transfer from the healthy to the sick partner and a strong dependence of saving on the survivor benefits, suggesting that concern about the surviving spouse is an important motive for saving.

Lim Rogers, Diane

PD February 1995. **TI** Political Competition, Casual Relationships Between Taxes and Spending, and Their Influence on Government Size: Evidence From State- Level Data. **AU** Lim Rogers, Diane; Rogers, John H. **AA** Lim Rogers: Congressional Budget Office. Rogers: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 500; Division of International Finance, Board of Governors of the Federal Reserve System,

Washington, DC 20551. **PG** 23. **PR** no charge. **JE** H71, H72. **KW** State Government. Political Competition. Fiscal Illusion. Taxation. Spending.
AB Theories of fiscal illusion and political competition have different implications for (i) the causal relationships between taxes and spending, and (ii) government size. These are tested using data from U.S. states from 1950 to 1990. We find evidence that greater political competition generally encourages bigger government, the Democratic Party is associated with bigger government, and state governments which "tax first, spend later" are more likely to be large. Other factors related to the fiscal illusion and political competition theories also appear to be important determinants of government size.

Linton, Oliver

PD September 1995. **TI** A Nonparametric Test of Conditional Independence. **AU** Linton, Oliver; Gozalo, Pedro L. **AA** Linton: Yale University. Gozalo: Brown University. **SR** Brown University, Department of Economics Working Paper: 95/30; Department of Economics, Brown University, Providence, RI 02912. **PG** 32. **PR** no charge. **JE** C12, C14, C52. **KW** Conditional Independence. Empirical Distribution. Nonparametric. Smooth Bootstrap.
AB We propose a nonparametric empirical distributional function based test of the conditional independence hypothesis. This hypothesis is of interest for model specification purposes, both parametric and semiparametric. The asymptotic null distribution of our test statistic is a mixture of chi-squares. A bootstrap procedure is proposed for calculating the critical values. Our test has power against alternatives at distance of one over the square root of n from the null; this result holding independently of dimension. Monte Carlo simulations provide evidence on size and power. We apply the test to the Boston housing dataset.

TI Using Parametric Information in Nonparametric Regression. **AU** Gozalo, Pedro L.; Linton, Oliver.

Liu, Jianmin

TI Marketing Table Grapes and Raisins in the Global Market. **AU** Moulton, Kirby S.; Liu, Jianmin.

Londregan, John

TI The Determinants of Success of Special Interests in Redistributive Politics. **AU** Dixit, Avinash; Londregan, John.

TI Redistribute Politics and Economic Efficiency. **AU** Dixit, Avinash; Londregan, John.

Lopez-de-Silanes, Florencio

PD May 1995. **TI** Privatization in the United States. **AU** Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W. **AA** Lopez-de-Silanes: Harvard University. Shleifer: Harvard University and National Bureau of Economic Research. Vishny: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5113; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $5.00. **JE** D73, H11, H41. **KW** Government Services. Privatization. Political Patronage. Public Provision. Efficiency.
AB In the United States, the two principal modes of producing local government services are in-house provision by government employees and contracting out to private suppliers, also known as privatization. We examine empirically how United States counties choose their mode of providing services. The evidence indicates that state clean-government laws and state laws restricting county spending encourage privatization, whereas strong public unions discourage it. The evidence is inconsistent with the view that efficiency considerations alone govern the provision mode and points to the important roles played by political patronage and taxpayer resistance to government spending in the privatization decision.

Lossa, Elisabetta

TI Competition, Regulation and Managerial Incentives. **AU** De Fraja, Gianni; Lossa, Elisabetta.

Loungani, Prakash

TI Evidence on Nominal Wage Rigidity from a Panel of U.S. Manufacturing Industries. **AU** Ghosal, Vivek; Loungani, Prakash.

PD July 1995. **TI** Supply-Side Sources of Inflation: Evidence from OECD Countries. **AU** Loungani, Prakash; Swagel, Phillip. **AA** Loungani: Board of Governors of the Federal Reserve System. Swagel: Northwestern University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 515; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 40. **PR** no charge. **JE** E31, E51, Q43. **KW** Inflation. Energy Prices. Price Rigidity. Menu-Costs. Supply Shocks.
AB We evaluate the merits of the "supply-side" view under which inflation results from sectoral shocks, and compare it with the "classical" view in which inflation results from aggregate factors such as variations in money growth. Using a panel VAR methodology applied to data for 13 OECD countries, we find support for a multi-shock view of inflation: supply-side shocks are statistically significant determinants of inflation, even after taking into account aggregate demand factors. While oil prices are the dominant supply-side influence, other measures such as the skewness of relative price changes are important as well. At short horizons, an innovation to skewness leads to an increase in inflation of 0.5 percentage points. As suggested by the classical view, money growth plays an increasingly important role as the time horizon lengthens.

TI Product Market Competition and the Impact of Price Uncertainty on Investment: Some Evidence from U.S. Manufacturing Industries. **AU** Ghosal, Vivek; Loungani, Prakash.

PD August 1995. **TI** Central Bank Independence, Inflation and Growth in Transition Economies. **AU** Loungani, Prakash; Sheets, Nathan. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 519; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 33. **PR** no charge. **JE** E31, E58, O57. **KW** Transition Economies. Central Bank Independence. Inflation. Economic Reform.
AB In this paper, we document two empirical relationships that have emerged as the former communist countries have taken steps to transform their economies from command systems to market-based systems. First, increased central bank independence has tended to improve inflation performance.

Second, high inflation has adversely affected real activity. More specifically, in the first section of this paper, we develop indices of central bank independence (CBI) for twelve transition economies and examine the relationship between CBI and inflation performances across these countries. Statistical evidence suggests that the transition economies with more independent central banks have achieved lower inflation than their counterparts. The second section of this paper studies the relationship between inflation and growth in twenty-six transition economies. We present econometric evidence indicating that reducing inflation helps stabilize economic activity, following the sharp output declines that occur during the initial stages of transition. The paper concludes that establishing an independent central bank is a concrete institutional reform that may reduce inflation and thus facilitate economic growth.

Lubyova, Martina

TI The Impact of Active Labor Market Policies: A Closer Look At The Czech and Slovak Republics. **AU** Burda, Michael C.; Lubyova, Martina.

Lund, Diderik

PD December 1994. **TI** Can a Small National Gain from Introducing a Carbon Tax Early? **AA** University of Oslo. **SR** Centre for Economic Policy Research, Discussion Paper: 1064; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 44. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** Q25, Q32. **KW** Carbon Taxes. Global Warming. Research and Development.

AB Carbon Dioxide emissions may cause global warming. But own emissions have negligible effects for a small nation, which may thus regard carbon taxes as distortionary. Such taxes may have other effects, however. When research and development (R&D) has positive external effects, carbon taxes may correct for some of these by giving incentives for R&D in particular directions. This may be beneficial when the nation faces a binding international agreement on reducing emission in a future period. This effect is analyzed, both for a case with a carbon tax alone, and for two different cases with R&D subsidies as well. Finally, a different international agreement is considered, under which the tax revenue is collected domestically.

Lundborg, Per

TI A Heckscher-Ohlin View of Sweden Competing in the Global Marketplace. **AU** Leamer, Edward E.; Lundborg, Per.

Lynch, Loretta

PD December 1995. **TI** Processing Costs for Canned Peaches. **AU** Lynch, Loretta; Moulton, Kirby S. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 775; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 36. **PR** $9.00 Domestic; $18.00 International Surface Rate. **JE** L66, F14. **KW** Processing Costs. Canned Peaches.

AB Global trade in canned peaches changed drastically over the past decade. World exports in 1994 were double their average in 1980-83. Greek processors accounted for 63 percent of exports in 1994 as compared to 37% in the earlier period; and California's share dropped from 13 percent to 3 percent. These changes have been driven by differences in processing costs, government policies concerning production and trade, consumer preferences, and by industry strategies. This report focuses on the first of these influencing factors: processing costs. It updates previous data using various cost and price trends and provides new data where available. The results are subject to limitations due to their anecdotal nature but show a range of $7 per standard case (24/2-1/2) between the lowest and highest cost producers. South Africa, Greece and Chile are grouped among the low-cost producers; California, Australia and Italy are in the mid range of costs; and Argentina and Spain are at the high end.

Lyons, Richard K

PD November 1994. **TI** Explaining Forward Exchange Bias. **AU** Lyons, Richard K; Rose, Andrew K. **AA** University of California, Berkeley. **SR** Centre for Economic Policy Research, Discussion Paper: 1059; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 12. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F31, G15. **KW** Foreign Exchange. Crises. Interest Rate. Defense. Returns.

AB Intra-day interest rates are zero. Consequently, a foreign exchange dealer can short a vulnerable currency in the morning, close this position in the afternoon, and never face an interest cost. This tactic might seem especially attractive in times of crisis, since it suggests an immunity to the central bank's interest rate defense. In equilibrium, however, buyers of the vulnerable currency must be compensated on average with an intra-day capital gain, as long as no devaluation occurs. That is, currencies under attack should typically appreciate intra-day. Using data on intra-day exchange rate changes within the European Monetary System, we find this prediction is borne out.

Macauley, Molly

TI Competition and Car Longevity. **AU** Hamilton, Bruce W.; Macauley, Molly.

Magat, Wesley A.

PD June 1995. **TI** Consumer Product Safety Regulation in the United States and the United Kingdom: The Case of Bicycles. **AU** Magat, Wesley A.; Moore, Michael J. **AA** Magat: Duke University. Moore: Duke University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5157; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** $5.00. **JE** I18, K32. **KW** Safety Regulation. Bicycles. Accident Rates.

AB We study the effects of bicycle safety regulations in both the United States and the United Kingdom on bicycle accident rates for various population age groups. We find small, statistically significant decreases in the accident rates as the stock of bicycles increases its compliance with the regulations. This result is independent of country, season, and trend effects and holds across a range of age groups. The results run counter to those in similar studies. This appears to reflect our focus on a specific standard, rather than on broad enabling legislation, and the longer time series available.

Mahal, Ajay S.

TI Does The Aids Epidemic Really Threaten Economic Growth? **AU** Bloom, David E.; Mahal, Ajay S.

Malliaris, A.G

PD July 1995. **TI** Microanalytics of Price Volatility. **AU** Malliaris, A.G.; Stein, Jerome L. **AA** Malliaris: Loyola University. Stein: Brown University. **SR** Brown University, Department of Economics Working Paper: 95/20; Department of Economics, Brown University, Providence, RI 02912. **PG** 29. **PR** no charge. **JE** D40, D81, D82, D83, D84. **KW** Price Volatility. Bayesian Learning. Nonlinear Dynamics. GARCH. Speculation.

AB We start with a generally accepted, simple model of price determination in asset markets. A rational, optimal Bayesian learning process is developed. We show how particular reasonable specifications of the simple model generate a nonlinear dynamic system that can produce either asymptotic stability, random walk or strange attractors. We examine the model using data for wheat, corn and soybeans. The nonlinear estimation rejects the chaotic paradigm. The random walk hypothesis is not rejected for soybeans. Our dynamic model is not rejected for wheat and corn. Our model provides an explanation of why researchers find the generalized autoregressive conditional heteroskedasticity (GARCH) models are often good empirical equations for conditional price variance.

Mankiw, N. Gregory

TI The Deficit Gamble. **AU** Ball, Laurence M.; Elmendorf, Douglas W.; Mankiw, N. Gregory.

Marin, Dalia

PD February 1995. **TI** Learning and Dynamic Comparative Advantage: Lessons from Austria's Post-War Pattern of Growth for Eastern Europe. **AA** Humboldt University, Berlin. **SR** Centre for Economic Policy Research, Discussion Paper: 1116; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 50. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F43, O32, O33, O47, P50. **KW** Trade. Growth. International Spillovers. Research and Development. Technology Policy.

AB This paper looks at Austria's pattern of development and its lessons for Eastern Europe. Austria's development path is characterized by three features. In the post-war era, Austria was among the countries with the fastest convergence rate. At the same time, Austria's movement up the technological ladder was slow compared with other European countries and came about with a small relative share of research and development in GDP. This paper uses insights from recent dynamic theories of trade to explain these three stylized facts. It is argued that resource endowments, international knowledge spillovers, learning, and government policy have contributed to Austria's post-war growth and the evolution of its pattern of trade over time. This paper looks at two lessons for Eastern Europe. First, it looks at Austria as a possible economic case for a gradual approach to economic reform. Second, in the light of the Australian experience, industrial and trade policy for economies in transition is discussed.

Marquez, Jaime

PD December 1995. **TI** A Century of Trade Elasticities for Canada, Japan, and the United States. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 531; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 32. **PR** no charge. **JE** C22, F41, O57. **KW** Rotterdam Model. Imports. Price Elasticities.

AB Virtually all that is known about the behavior of imports rests on studies estimating income and price elasticities with postwar data. But anyone examining the evolution of trade over the last century cannot avoid asking whether the postwar period provides enough information to characterize that behavior. Indeed, the literature ignoring that past offers a large range of elasticity estimates suggesting that the role of income and prices in determining imports is not known with any precision. This paper offers the first analysis of that role using data since 1890 for Canada, Japan, and the United States. Estimating the elasticities of the most popular model in the literature with 1890-1992 data, I find that income and prices do not affect imports whereas the opposite conclusions arises with postwar data. The difference in results stems from changes in the composition of expenditures between domestic and foreign products. As an alternative, I consider several models consistent with both optimization and the time-series properties of the data. These models predict substantial secular changes in income and price elasticities and confirm the importance of optimization for characterizing the behavior of imports.

Marshall, David A.

TI On Biases in Tests of the Expectations Hypothesis of the Term Structure of Interest Rates. **AU** Bekaert, Geert; Hodrick, Robert J.; Marshall, David A.

Martin, Philippe

PD November 1994. **TI** A Sequential Approach to Regional Integration: The European Union and Central and Eastern Europe. **AA** Graduate Institute of International Studies. **SR** Centre for Economic Policy Research, Discussion Paper: 1070; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, F14, F15. **KW** Sequential Integration. Central Europe. Eastern Europe. Convergence. EU.

AB This paper develops a theory of optimal sequencing of regional integration and applies it to the specific question of Central and East European countries (CEECs) and the EU. We show that the timing of transition and integration has implications for the long-term trade structure of Europe. In this model, the motivation to integrate the CEECs comes from harmonization of policies to attract industries. Without integration, European countries will try inefficiently to protect their industries. Because of the transfers implied by the CAP and the Structural Policies, the EU will delay enlargement until the CEECs have sufficiently converged. CEECs might then prefer to stay outside the EU and attract industries by offering them more generous protection than the EU. Such timing may be inefficient ex ante for all countries because it may prevent full European integration in the long run, inducing firms to relocate outside of the EU and governments in the EU and the CEECs to protect industry. During the transition, all countries benefit from regional integrating among the CEECs.

TI Causality Implications of the Public-Finance Approach to Inflation and Seigniorage. **AU** Diba, Behzad T.; Martin, Philippe.

PD February 1995. **TI** Optimal Stabilization Policy in the Presence of Learning by Doing. **AU** Martin, Philippe; Rogers, Carol Ann. **AA** Martin: Graduate Institute of International Studies, Switzerland. Rogers: Georgetown University. **SR** Centre for Economic Policy Research, Discussion Paper: 1129; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E32, H21, O41, O47. **KW** Stabilization Policy. Learning By Doing. Growth. Cycles.
AB The paper analyzes, along the transition path and in steady state, the optimal stabilization policy in an economy in which growth is driven by learning by doing. If future benefits of learning by doing are not fully internalized by workers, the optimal fiscal policy is to tax labor during expansions so as to be able to subsidize it during recessions. The long-term impact on output and on human capital of such a policy depends critically on initial conditions. If stabilization is initiated during an expansion, its effect on long-term production is positive. The long-term effect is negative when stabilization is initiated during a recession.

PD February 1995. **TI** Stabilization Policy, Learning by Doing, and Economic Growth. **AU** Martin, Philippe; Rogers, Carol Ann. **AA** Martin: Graduate Institute of International Studies, Switzerland. Rogers: Georgetown University. **SR** Centre for Economic Policy Research, Discussion Paper: 1130; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E32, H21, O41, O47. **KW** Stabilization Policy. Learning By Doing. Growth. Cycles.
AB This paper shows that fiscal policy, when used for stabilization purposes, can have a positive effect on the economy's growth, on human capital accumulation, and on welfare, along the transition path. We introduce symmetric productivity shocks into a model in which productivity is augmented through learning by doing. If future benefits of learning by doing are not fully internalized by workers, then recessions are periods in which opportunities for acquiring experience are foregone. We identify configurations of disturbances and other parameters for which a countercyclical policy maximizes growth and welfare.

Masson, Paul R.

TI Fiscal Flows in the United States and Canada: Lessons for Monetary Union in Europe. **AU** Bayoumi, Tamim A.; Masson, Paul R.

Mavroidis, Petros C.

TI The WTO's Agreement on Government Procurement: Expanding Disciplines, Declining Membership? **AU** Hoekman, Bernard M.; Mavroidis, Petros C.

McAndrews, James J.

PD June 1995. **TI** Simulations of Failure in a Payment System. **AU** McAndrews, James J.; Wasilyew, George. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/19; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 15. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** C15, E51, G21. **KW** Bank Failure. Simulation. Payment Schedule.
AB We conduct simulations of the performance of a payment settlement system after one of the participants in the system fails to deliver payment. This exercise is meant to supplement Humphrey (1986), who, using actual payment entry data from the Clearinghouse Interbank Payment System (CHIPS), simulated the performance of CHIPS in the event of the failure of the bank with the largest net debit to the system. We follow a similar strategy of simulation, using data we generate, to test the performance of a settlement system as the number of banks, the size of the payments, and the likelihood that any two banks in the system exchange payments vary. Our results suggest that the risk that any given payment fails to be executed varies directly with the number of participants in the settlement system, the variance of the size of payments entered into the system, and the likelihood of interaction among banks in the system.

McCue, Kristin

TI Using Establishment Size to Measure the Impact of Title VII and Affirmative Action. **AU** Carrington, William J.; McCue, Kristin; Pierce, Brooks.

McDonald, Bradley

TI The Uruguay Round: A Global General Equilibrium Assessment. **AU** Francois, Joseph F.; McDonald, Bradley; Nordstrom, Hakan.

McNichols, Maureen F.

TI Factors Influencing Firms' Disclosures About Environmental Liabilities. **AU** Barth, Mary E.; McNichols, Maureen F.; Wilson, G. Peter.

Mei, Jianping

TI Strategic Returns to International Diversification: An Application to the Equity Markets of Europe, Japan, and North America. **AU** Ammer, John; Mei, Jianping.

Melick, William R.

TI Alternative Approaches to Real Exchange Rates and Real Interest Rates: Three Up and Three Down. **AU** Edison, Hali I.; Melick, William R.

PD February 1996. **TI** Using Options Prices to Infer PDFs for Asset Prices: An Application to Oil Prices During the Gulf Crisis. **AU** Melick, William R.; Thomas, Charles P. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 541; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 39. **PR** no charge. **JE** G12, G13, G14. **KW** Option Prices. Distributions. Oil. Futures.
AB We develop a general method to infer martingale equivalent probability density functions (PDFs) for asset prices using American options prices. The early exercise feature of American options precludes expressing the option price in terms of the PDF of the price of the underlying asset. We derive tight bounds for the option price in terms of the PDF and

demonstrate how these bounds, together with observed option prices, can be used to estimate the parameters of the PDF. We infer the distribution for the price of crude oil during the Persian Gulf crisis and find the distribution differs significantly from that recovered using standard techniques.

Mello, Antonio S.

PD December 1994. **TI** Auctions of Shares with a Secondary Market and Tender Offers. **AU** Mello, Antonio S.; Parsons, John E. **AA** Mello: Banco de Portugal. Parsons: Columbia University. **SR** Centre for Economic Policy Research, Discussion Paper: 1077; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 32. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** C72, G32. **KW** Sales of Shares. Ownership Structure. Mechanism Design.

AB The method of sale of a corporation's shares has important effects on its value and future performance. The market for shares is composed of both small investors purchasing shares for portfolio reasons and large investors with an interest in obtaining control. This inherent asymmetry is critical in the design of an optimal method of sale. Should the sale disperse the shares and let interested shareholders assemble a controlling bloc in the secondary market, or alternatively should the sale reserve and transfer directly control of the shares? This paper analyses alternative methods of the sale of shares, taking into account the opportunities created by the existence of a secondary market including a tender offer market for the shares. With private as well as public benefits from ownership, we show how competition among different investors determines the optimal method of sale. The paper provides guidelines for the design of sales in privatizations and in IPOs (Initial Public Offers) and makes clear the importance of setting the right ownership structure for the firm.

Mendelson, Haim

TI Information and Organization for Horizontal Multimarket Coordination. **AU** Anand, Krishnan S.; Mendelson, Haim.

Mendoza, Enrique G.

PD March 1995. **TI** Supply-Side Economics in a Global Economy. **AU** Mendoza, Enrique G.; Tesar, Linda L. **AA** Mendoza: Board of Governors of the Federal Reserve System. Tesar: University of California, Santa Barbara. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 507; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 58. **PR** no charge. **JE** E62, F41, F42, H21. **KW** Fiscal Policy. Global Economy. Supply-Side Economics. Taxation.

AB Recent quantitative studies predict large welfare gains from reducing tax distortions in a closed economy, despite costly transition dynamics to more efficient tax systems. This paper examines transitional dynamics and gains of tax reforms for countries in a global economy, and provides numerical solutions for international tax competition games. Tax reforms in a global economy cause cross-country externalities through capital flows in response to consumption-smoothing and debt-servicing effects, with taxes on world payments affecting the distribution of welfare gains. Within the class of time-invariant tax rates, the gains of replacing income taxes with consumption taxes are large and, in the absence of taxes on foreign assets, the monopoly distortion separating cooperative and noncooperative equilibria is negligible. The analysis starts from a benchmark reflecting current G-7 fiscal policies, and considers the effects of tax reforms on real exchange rates and interest differentials. Tax-distorted equilibrium dynamics are computed using a modified version of the King-Plosser-Rebelo algorithm augmented with shooting routines.

PD June 1995. **TI** Do Taxes Matter for Long-Run Growth?: Harberger's Superneutrality Conjecture. **AU** Mendoza, Enrique G.; Milesi-Ferretti, Gian Maria; Asea, Patrick. **AA** Mendoza: Board of Governors of the Federal Reserve System. Milesi- Ferretti: International Monetary Fund. Asea: University of California, Los Angeles. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 511; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 44. **PR** no charge. **JE** E62, O41, O57. **KW** Endogenous Growth. Private Investment. Taxation.

AB Harberger's superneutrality conjecture contends that, although in theory the mix of direct and indirect taxes affects investment and growth, in practice growth effects of taxation are negligible. This paper provides evidence in support of this view by testing the predictions of endogenous growth models driven by human capital accumulation. Theoretical analysis highlights implications of different taxes for growth and investment in these models. The empirical work is based on cross-country regressions and numerical simulations, using a new methodology for estimating aggregate effective tax rates. Results show significant investment effects from income and consumption taxes that are consistent with small growth effects. The results are robust to the introduction of other growth determinants.

Mester, Loretta J.

TI Recovering Technologies That Account for Generalized Managerial Preferences: An Application to Non-Risk-Neutral Banks. **AU** Hughes, Joseph; Lang, William W.; Mester, Loretta J.; Moon, Choon-Geol.

TI Consumer Behavior and the Stickiness of Credit Card Interest Rates. **AU** Calem, Paul S.; Mester, Loretta J.

Meyer, Margaret A.

PD January 1995. **TI** Performance Comparisons and Dynamic Incentives. **AU** Meyer, Margaret A.; Vickers, John. **AA** Meyer: Nuffield College. Vickers: Institute of Economics and Statistics, Oxford. **SR** Centre for Economic Policy Research, Discussion Paper: 1107; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 33. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D23, J33, L22. **KW** Incentives. Performance Comparisons. Rachet Effect.

AB It is well known that comparative performance information (CPI) can enhance efficiency in static principal-agent relationships by improving the trade-off between insurance and incentives in the design of explicit contracts. In dynamic settings, however, there may be implicit as well as explicit incentives (e.g., managerial career concerns and the ratchet effect in regulation). We show that the dynamic effects of CPI on implicit incentives can either reinforce or oppose the familiar (static) insurance effect and can in either case be the dominant factor affecting efficiency. The overall welfare effects of CPI are thus ambiguous and can be characterized in terms of the underlying information structure.

Micklewright, John

PD January 1995. **TI** Unemployment Insurance and Incentives in Hungary. **AU** Micklewright, John; Nagy, Gyula. **AA** Micklewright: European University Institute, Italy. Nagy: Budapest University of Economics. **SR** Centre for Economic Policy Research, Discussion Paper: 1118; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 42. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** C41, J64, J65, P35. **KW** Unemployment Benefit. Incentives. Hungary. Transition.

AB We investigate the effect of changes in unemployment insurance (UI) rules in Hungary on the outflow rate from the UI register. Existing claims to UI are grandfathered in Hungary when UI rules change -- new rules are applied only to new claims and existing claims continue to be administered under the old rules. Entitlement periods to UI were cut substantially at the start of 1993 and using non-parametric methods we compare the outflow rate from claims beginning in January 1993 with those beginning in December 1992 -- a total sample size of 80,000 claims. Differences in job exit hazards between the December and January samples are found for some work history groups, but there are no sharp rises in the hazards before expiry of UI entitlements. Hazards of exits to labor market programs do rise just before UI expiry. The results suggest the unemployed in Hungary to be fairly inelastic to changes in UI benefits.

Mihov, Ilian

TI Measuring Monetary Policy. **AU** Bernanke, Ben S.; Mihov, Ilian.

Milesi-Ferretti, Gian Maria

TI Do Taxes Matter for Long-Run Growth?: Harberger's Superneutrality Conjecture. **AU** Mendoza, Enrique G.; Milesi-Ferretti, Gian Maria; Asea, Patrick.

Miller, Jeffrey B.

TI Contracts in Bulgaria: How Firms Cope When Property Rights are Incomplete. **AU** Koford, Kenneth; Miller, Jeffrey B.

PD April 1996. **TI** Banking in the Bulgarian Economy. **AU** Miller, Jeffrey B.; Petranov, Stefan. **AA** Miller: University of Delaware. Petranov: Bulgarian Consulting Group. **SR** University of Delaware, Department of Economics, Working Paper: 96/4; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 87. **PR** not available. **JE** G21, E58. **KW** Bulgaria. Banking. Institutions.

AB This text summarizes the institutions of the Bulgarian banking system.

Miller, Marcus

PD November 1995. **TI** Hyperinflation and Stabilization: Cagan Revisited. **AU** Miller, Marcus; Zhang, Lei. **AA** Miler: Board of Governors of the Federal Reserve System. Zhang: University of Warwick. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 529; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 21. **PR** no charge. **JE** E31, E41, E63. **KW** Seignorage. Stabilization. Hyperinflation. Taxation.

AB In this paper Cagan's analysis of hyperinflations is adapted to look at situations where the deficits to be financed by money creation are large and variable, but fiscal stabilization is expected -- features found in some of the republics of the Former Soviet Union soon after independence. The impact of various stabilization policies on real balances and inflation expectations is studied, assuming expectations are rational and deficits follow a geometric Brownian motion until the stabilization takes place. For a modified form of Cagan's demand function we are able to obtain explicit solutions using Ito's Lemma; these are calibrated to give numerical estimates of the effects of expected fiscal stabilization.

Mills, Terence C.

TI Europe's Golden Age: An Econometric Investigation of Changing Trend Rates of Growth. **AU** Crafts, Nicholas F. R.; Mills, Terence C.

Moffitt, Robert A.

TI A Structural Model of Multiple Welfare Program Participation and Labor Supply. **AU** Keane, Michael; Moffitt, Robert A.

PD July 1995. **TI** Trends in the Autocovariance Structure of Earnings in the U.S.: 1969- 1987. **AU** Moffitt, Robert A.; Gottschalk, Peter. **AA** Gottschalk: Boston College. Moffitt: Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 355; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 20. **PR** no charge. **JE** J31, C22. **KW** Wage Structure. Inequality. Covariance Matrix.

AB We examine the increasing variance of earnings of white men over the 1970s and 1980s by focusing on changes in the covariance structure of earnings. Using data from the Michigan PSID from 1969-1987, we find that about half of the increase has arisen from an increase in the variance of the permanent component of earnings and half from an increase in the variance of the transitory component, where the transitory component is composed of serially correlated shocks that die out within three years. We thus find that increases in the variability of earnings are of equal importance to increases in the dispersion of permanent earnings in explaining recent increases in earnings inequality.

PD September 1995. **TI** A Structural Model of Multiple Welfare Program Participation and Labor Supply. **AU** Moffitt, Robert A.; Keane, Michael. **AA** Moffitt: Johns Hopkins University. Keane: University of Minnesota. **SR** Johns Hopkins University, Department of Economics, Working Paper: 356; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 30. **PR** no charge. **JE** J22, I38, C15. **KW** Welfare. Labor Supply. Simulation Estimation.

AB One of the long-standing issues in the literature on transfer programs for the U.S. low-income population concerns the high cumulative marginal tax rate on earnings induces by participation in the multiplicity of programs offered by the government. Empirical work on the issue has reached an impasse partly because the analytic solution to the choice problem is intractable and partly because the model requires the estimation of multiple sets of equations with limited dependent variables, an estimation problem which until recently has been computationally infeasible. In this paper we estimate a model of labor supply and multiple program participation using methods of simulation estimation that enable us to solve both problems. The results show asymmetric wage and tax rate effects with fairly large wage elasticities of labor supply but very inelastic responses to moderate changes in cumulative marginal tax rates, implying that high welfare tax rates do not necessarily induce major reductions in work effort.

Montgomery, David B.

TI Perceiving Competitive Reactions: The Value of Accuracy (And Paranoia). **AU** Clark, Bruce H.; Montgomery, David B.

Montgomery, Edward

TI Cyclical Versus Secular Movements in Employment Creation and Destruction. **AU** Eberts, Randall W.; Montgomery, Edward.

Moon, Choon-Geol

TI Recovering Technologies That Account for Generalized Managerial Preferences: An Application to Non-Risk-Neutral Banks. **AU** Hughes, Joseph; Lang, William W.; Mester, Loretta J.; Moon, Choon-Geol.

Moore, Michael J.

PD June 1995. **TI** Habit and Heterogeneity in the Youthful Demand for Alcohol. **AU** Moore, Michael J.; Cook, Philip J. **AA** Moore: Duke University and National Bureau of Economic Research. Cook: Duke University. **SR** National Bureau of Economic Research, Working Paper: 5152; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** D12, I12, J13. **KW** Alcoholic Consumption. Youthful Drinking. Habit Formation.

AB Observed patterns of youthful drinking indicate substantial persistence. This paper analyzes how much of that persistence reflects the actual development of a habit and how much is due to unobserved aspects of the individual and the environment. The role of restrictions on alcohol availability, both in the current period and in adolescence, is also explored. We find that much of the observed persistence represents habit formation, and not unobserved characteristics. Consequently, restrictions on availability, particularly at an early age, alter subsequent patterns of alcohol consumption and abuse.

PD June 1995. **TI** Death and Tobacco Taxes. **AA** Duke University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5153; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** $5.00. **JE** I12, H21, H24. **KW** Taxes. Tobacco. Mortality.

AB This study analyzes the effects of tobacco excise tax changes on mortality due to heart disease, cancer and asthma. Reduced form regressions of mortality rates on tax data for the years 1954-1988, with controls for state, year, income, and unobserved persistence, indicate that tax increases lead to statistically significant decreases in mortality. A 10 percent increase in the tax is projected to save approximately 5200 lives a year.

TI Consumer Product Safety Regulation in the United States and the United Kingdom: The Case of Bicycles. **AU** Magat, Wesley A.; Moore, Michael J.

Morgan, Peter B.

PD July 1996. **TI** Undercut-Proof Equilibria. **AU** Morgan, Peter B.; Shy, Oz. **AA** Morgan: State University of New York. Shy: Tel Aviv University and University of Michigan. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 20/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 26. **PR** no charge. **JE** L13, L15, D43. **KW** Undercut-Proof. Differentiated Products. Conjectural Variations.

AB We propose an equilibrium concept called Undercut-Proof equilibrium for price competition between firms producing differentiated brands. We demonstrate that whereas a Nash-Bertrand equilibrium in pure actions never exists, a unique Undercut-Proof equilibrium always exists and has the following properties: (a) Brands' prices monotonically diverge when the brands become more differentiated and are identical when the brands become homogeneous; (b) the firm with the larger market share charges a lower price than the firm with the smaller market share but earns a larger profit. The Undercut-proof equilibrium is easily calculable.

Morris, Stephen

PD October 1995. **TI** Informational Events That Trigger Currency Attacks. **AU** Morris, Stephen; Shin, Hyun Song. **AA** Morris: University of Pennsylvania and Federal Reserve Bank of Philadelphia. Shin: University of Southampton. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/24; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 22. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** F31, D82. **KW** Currency Crisis. Common Knowledge.

AB When a currency is susceptible to a self-fulfilling speculative attack, some informational events will trigger an attack on the currency while others will not. We address some of the mechanisms behind this difference. We show that a large piece of bad news need not lead to an attack, provided investors agree on how to interpret that news. On the other hand, an apparently insignificant piece of news may trigger an attack if investors do not agree on how to interpret the news. The key to this difference is the operation of higher order beliefs. Uncertainty about the beliefs of others depends on subtle features of the information structure, and even small disparities in interpretation lead to large changes in the equilibrium outcome.

Motta, Massimo

PD January 1995. **TI** On the Persistence of Leadership or Leapfrogging in International Trade. **AU** Motta, Massimo; Thisse, Jacques-Francois; Cabrales, Antonio. **AA** Motta and Cabrales: Universitat Pompew Fabra, Spain. Thisse: CERAS. **SR** Centre for Economic Policy Research, Discussion Paper: 1106; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 26. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F12, F15, L13. **KW** International Trade. Product Differentiation. Country Asymmetries. Integrated Markets. Segmented Markets.

AB When two countries, starting from different quality levels reflecting different conditions of domestic market demand, open to trade, two possible equilibria arise. In the first, the quality leader maintains its position. In the second, leapfrogging occurs. The latter is possible only if the initial quality gap is not too wide, however. Further, when the risk dominance criterion is used, only the former equilibrium is selected. This result holds for both segmented and integrated markets. Qualities, profits and world welfare are higher when firms can price discriminate (i.e., under segmented markets).

Moulton, Kirby S.

PD January 1995. **TI** Competition and Trade in Canned Peaches: The Situation Relative to Chile. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 737; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 34. **PR** $8.50 Domestic; $17.00 International Surface Rate. **JE** F13, L11, Q13. **KW** Canned Peaches. Marketing. Tariff Reduction.

AB This report presents an overview of cling peach production, processing, and trade in California and Chile. Its objective is to evaluate the complex institutional and economic relationships that govern the industries and assess what might happen to prices, production, and final demand if the U.S. tariff on canned peaches is reduced or eliminated. It demonstrates the sensitivity of costs to the prices of labor and raw product, and the insensitivity of final demand to changes in canned peach prices. The report is organized into four sections. the first presents the report's key conclusions, the second outlines the overall implications of a free trade agreement, and the third and fourth sections analyze the current and prospective competitive situations for canned peaches in the United States and Chile, respectively.

PD July 1995. **TI** Marketing Table Grapes and Raisins in the Global Market. **AU** Moulton, Kirby S.; Liu, Jianmin. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 752; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 93. **PR** $23.25 Domestic; $46.50 International Surface Rate. **JE** Q17. **KW** Marketing. Grapes. Raisins. International Trade. Fruits. Consumption.

AB The purpose of this study is to identify emerging markets for table grapes and raisins so that governments and private sector enterprises can guide production and market development policies and strategies. We recognize two important classes of markets. The first comprises those markets characterized by strong economic growth, liberalization of market restrictions, and changes in consumer preferences. Broadly, the markets of Southeast Asia are in this class. Demand is likely to increase and can be served by new or different suppliers without necessarily taking business away from existing suppliers. The second class includes the more stable markets with moderate economic growth, little, if any, population growth, and few changes in consumer preferences. Demand is unlikely to expand by much, and market gains by on supplier are likely to be earned at the expense of other suppliers. The markets of Europe and North America are probably in this class. The primary focus of this study is on the first class of markets, where there is the potential for absorbing added global production. The study first presents a global overview of production and trade in table grapes and raisins. It then examines important markets in terms of current performance, anticipated economic growth, and expected changes in demand. Finally, the study concludes with an analysis of strategic considerations necessary for market development.

PD July 1995. **TI** The Impacts on Wine Demand of Balanced Messages About Wine and Health. **AA** University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 753; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 9. **PR** $5.00 Domestic; $10.00 International Surface Rate. **JE** I12, L66, D12. **KW** Wine Demand. Health. Consumer Demand. Benefit-Cost. Analysis.

AB The benefits of a balanced education and communications program about moderate wine consumption can be substantial. If such a program succeeded in shifting consumer behavior toward healthy diets including the moderate consumption of wine, an economic gain of $36 billion might be achieved world-wide. This analysis describes conditions under which these substantial gains might be achieved. The key points are that the potential gains from reduced health care costs are not large, but the potential productivity gains from longer life spans are large, and merit attention. Industry gains will be substantial for growers and wineries.

TI Processing Costs for Canned Peaches. **AU** Lynch, Loretta; Moulton, Kirby S.

Mullahy, John

PD May 1995. **TI** Employment, Unemployment, and Problem Drinking. **AU** Mullahy, John; Sindelar, Jody L. **AA** Mullahy: Trinity College and National Bureau of Economic Research. Sindelar: Yale School of Public Health and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5123; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** $5.00. **JE** I12, J24, J64. **KW** Alcohol. Employment. Productivity. Unemployment.

AB The misuse of alcoholic beverages ("problem drinking") has been demonstrated to result in enormous economic costs; most of these costs have been shown to be reduced productivity in the labor market. The purpose of this paper is to present sound structural estimates of the relationship between various measures of problem drinking and of employment and unemployment. The sample of approximately 15,000 observations is drawn from the 1988 Alcohol Survey of the National Health Interview Survey, the first data set that enables nationally- representative estimates of alcohol abuse and dependence consistent with generally accepted medical criteria. The structural estimates of the effects of problem drinking on employment and labor market participation are obtained using methods proposed by Amemiya and by Heckman and MaCurdy. For our sample of males ages 25 to 59, we find that using the instrumental variable approach suggests that the negative impact of problem drinking on employment is even greater than that estimated using the OLS approach. Interestingly, the IV estimates on the samples of females change the sign from a positive impact of problem drinking on employment to a negative impact. Thus although the conclusions drawn from raw data comparisons and OLS regressions differ by gender, the IV estimates are very similar for men and women. For women, the unobserved heterogeneity masks the negative impact of problem drinking on employment when using OLS estimation methods.

Mulligan, Casey B.

PD March 1995. **TI** A Labour-Income-Based Measure of the Value of Human Capital: An Application to the States of the United States. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier. **AA** Mulligan: University of Chicago. Sala-i-Martin: Universitat Pompeu Fabra. **SR** Centre for Economic Policy Research, Discussion Paper: 1146; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 57. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** C33, C82, O41. **KW** Human Capital. Panel Data. Two-Sector Growth.

AB We argue that a sensible measure of the aggregate value of human capital is the ratio of total labor income per capita to the wage of a person with zero years of schooling. The reason is that total labor income not only incorporates human capital, but also physical capital; given human capital, regions with higher physical capital will tend to have higher wages for all workers and, therefore, higher labor income. We find that one way to net out the effect of aggregate physical capital on labor income is to divide labor income by the wage of a zero- schooling worker. For the average U.S. state, our measure suggests that the value of human capital during the 1980s grew at a much larger rate than schooling. The reason has to do with movements in the relative productivities of the different workers; in some sense, some workers and some types of schooling became a lot more relevant in the 1980s and, as a result, measured human capital increased.

Mulligan, James G.

TI Monopolistically Competitive Price and Waiting Time Dispersion. **AU** Daniel, Joseph I.; Mulligan, James G.

Murdock, Kevin

TI Financial Restraint: Towards a New Paradigm. **AU** Hellmann, Thomas; Murdock, Kevin; Stiglitz, Joseph.

TI Deposit Mobilization through Financial Restraint. **AU** Hellmann, Thomas; Murdock, Kevin; Stiglitz, Joseph.

TI Financial Sector Development Policy: The Importance of Reputational Capital and Governance. **AU** Hellmann, Thomas; Murdock, Kevin.

Murnane, Richard J.

TI Are Lots of College Graduates taking High School Jobs? A reconsideration of the Evidence. **AU** Tyler, John; Murnane, Richard J.; Levy, Frank.

Myers, Stewart, C.

PD June 1995. **TI** The Paradox of Liquidity. **AU** Myers, Stewart, C.; Rajan, Raghuram G. **AA** Myers: Massachusetts Institute of Technology and National Bureau of Economic Research. Rajan: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5143; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 33. **PR** $5.00. **JE** G31, G32. **KW** Asset Liquidity. Debt Capacity.

AB The more liquid a company's assets, the greater their value in a short-notice liquidation. Liquid assets are generally viewed as increasing debt capacity, other things being equal. This paper focuses on the dark side of liquidity; greater liquidity reduces the ability of borrowers to commit to a specific course of action. It examines the effects of differences in asset liquidity on debt capacity. It suggests an alternative theory of financial intermediation and disintermediation.

Nagy, Gyula

TI Unemployment Insurance and Incentives in Hungary. **AU** Micklewright, John; Nagy, Gyula.

Nakamura, Leonard I.

PD August 1995. **TI** New Directions in Information and Screening in Real Estate Finance. **AU** Nakamura, Leonard I.; Lang, William W. **AA** Nakamura: Federal Reserve Bank of Philadelphia. Lang: Office of the Comptroller of the Currency. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/17; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 9. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** J15, E51, D82, R12, E44. **KW** Racial Discrimination. Lending. Banking. Mortgages. Regional Effects.

AB This paper surveys recent research into racial discrimination in mortgage lending as well as the link between the U.S. macroeconomy and regional economies.

PD October 1995. **TI** Is U.S. Economic Performance Really That Bad? **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/21; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 31. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D11, E25, D24, O47. **KW** Engel Curve. Productivity Slowdown. Consumer Surplus.

AB This paper makes three tentative claims: 1) unmeasured consumer surplus has serious consequences for the measurement of U.S. economic growth in the past decade or two and now accounts for 2 to 3 percentage points of unmeasured real growth; 2) adding 2 to 3 percent annually to real PCE provides a more internally consistent view of the U.S. consumer than the official statistics on real PCE; and 3) Engel curve evidence suggests that mismeasurement of prices has accelerated significantly and may well explain the apparent post-1974 productivity slowdown.

Navon, Ami

PD May 1995. **TI** Product Differentiation in the Presence of Snob and Bandwagon Effects. **AU** Navon, Ami; Shy, Oz; Thisse, Jacques-Francois. **AA** Navon and Shy: Tel Aviv University and Michigan University. Thisse: Universite de Paris and CERAS-ENPC. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 16/95; Department of Economics, Tel Aviv University, Ramat Aviv

69978, ISRAEL. **PG** 21. **PR** no charge. **JE** L15, R32, D11, D43. **KW** Snobbery. Conformity. Product Differentiation. Location.

AB Using two standard location models, we investigate price competition and divergence from optimal product differentiation when consumer preferences are influenced by the number of consumers shopping at the same store. Snob effects tend to lessen competition and increase prices while bandwagon effects make competition fiercer and lead to lower prices. Furthermore, in the duopoly case, an increase in the total population may hurt the clients of a store despite the fact that they benefit from price cuts. Finally, under free entry, increasing the population may lead to a decrease in the equilibrium number of stores and always enlarges the divergence between the equilibrium and optimal numbers of stores.

Neal, Derek A.

PD May 1995. **TI** The Role of Pre-Market Factors in Black-White Wage Differences. **AU** Neal, Derek A.; Johnson, William R. **AA** Neal: University of Chicago and National Bureau of Economic Research. Johnson: University of Virginia. **SR** National Bureau of Economic Research, Working Paper: 5124; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** $5.00. **JE** J24, J31, J71. **KW** Discrimination. Wage Gap. Labor Skills.

AB Many attempts to measure the wage effects of current labor market discrimination against minorities include controls for worker productivity that (1) could themselves be affected by market discrimination and (2) are very imprecise measures of worker skill. The resulting estimates of residual wage gaps may be biased. Our approach is a parsimoniously specified wage equation which controls for skill with the score of a test administered as teenagers prepared to leave high school and embark on work careers or post-secondary education. Independent evidence shows that this test score is a racially unbiased measure of the skills and abilities these teenagers were about to bring to the labor market. We find that this one test score explains all of the black-white wage gap for young women and much of the gap for young men. For today's young adults, the black-white wage gap primarily reflects a skill gap, which in turn can be traced, at least in part, to observable differences in the family backgrounds and school environments of black and white children. While our results do provide some evidence of current labor market discrimination, skill gaps play such a large role that we believe future research should focus on the obstacles black children face in acquiring productive skills.

Nordstrom, Hakan

TI The Uruguay Round: A Global General Equilibrium Assessment. **AU** Francois, Joseph F.; McDonald, Bradley; Nordstrom, Hakan.

Nowlis, Stephen M.

PD June 1995. **TI** The Effect of New Product Features on Brand Choice. **AU** Nowlis, Stephen M.; Simonson, Itamar. **AA** Nowlis: Washington State University. Simonson: Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1336; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 26. **PR** no charge. **JE** M31, L15. **KW** Marketing. Features. Brand Choice.

AB Companies often introduce new product features in order to differentiate their brands and gain a competitive advantage. In this research we investigate factors that moderate the impact of a new feature on brand choice. Building on two principles, refereed to as multiattribute diminishing sensitivity and performance uncertainty, we propose that the characteristics of the products to which new features are added are important determinants of the impact of these features on sales and market share. Specifically, in six studies we show that a new feature adds greater value and increases the choice share of a brand more when (1) the brand has relatively inferior existing features, (2) the brand is associated with lower (perceived) quality, (3) the brand has a higher price, and (4) the brand has both higher price and higher quality. The results also suggest the (1) the addition of a new feature reduces buyers' price sensitivity for lower quality but not for higher quality brands, and (2) multiattribute diminishing sensitivity is a more important moderator of the effect of new features than performance uncertainty. We discuss the theoretical and practical implications of the findings.

PD July 1995. **TI** The Effect Of Choice Set Composition On Consumer Response To Sales Promotions. **AU** Nowlis, Stephen M.; Simonson, Itamar. **AA** Nowlis: Washington State University. Simonson: Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1337; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 24. **PR** no charge. **JE** M37, L15. **KW** Promotion. Brand Choice. Buyer Behavior.

AB Recent research suggests that the response to sales promotion depends on the price-quality tier of the promoting brand, with high-tier brands tending to gain more share than lower-tier brands (e.g., Blattberg and Wisniewski 1989). We examine the effect of the choice set composition on this asymmetry in response to promotions and, more generally, on the likelihood of brand switching. Specifically, building on research indicating that a brand at an intermediate price-quality tier tends to take more share from a low-tier brand than from a high-tier brand, we propose that the asymmetric response to promotions will be eliminated when consumers consider three, rather than two, brands at different price-quality tiers. Furthermore, the addition of an "extreme" option (e.g., a high-tier national brands such as Bounty paper towel) to a two-option choice set is expected to increase the absolute response to promotions on the lower-tier existing brand (e.g., a store brand and decrease the response to promotions on the high-tier existing brand (e.g., a mid-tier national brand such as Brawny paper towel). The results of four studies supported these hypotheses and also demonstrated that the same pattern of effects is observed for different model-tiers of a particular brand. The theoretical and practical implications of these findings are discussed.

O Ravn, Morten

TI International Consumption Risk Sharing. **AU** Canova, Fabio; O Ravn, Morten.

Obstfeld, Maurice

PD February 1995. **TI** Exchange Rate Dynamics Redux. **AU** Obstfeld, Maurice; Rogoff, Kenneth. **AA** Obstfeld: University of California, Berkeley. Rogoff: Princeton University. **SR** Centre for Economic Policy Research, Discussion Paper: 1131; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 41. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F31, F32, F41, F47. **KW** Exchange Rate Dynamics. Sticky Prices. Macroeconomic Models. Current Account.

AB We develop an analytically tractable two-country model that marries a full account of global macroeconomic dynamics to a supply framework based on monopolistic competition and sticky nominal prices. The model offers simple and intuitive predictions about exchange rates and current accounts that sometimes differ sharply from those of either modern flexible-price intertemporal models, or traditional sticky-price Keynesian models. Our analysis leads to a novel perspective on the international welfare spillovers due to monetary and fiscal policies.

Ofek, Eli

TI Leverage, Investment, and Firm Growth. **AU** Lang, Larry; Ofek, Eli; Stulz, Rene M.

Okongwu, Chudozie

TI Liberalized Portfolio Capital Inflows in Emerging Markets: Sterilization, Expectations, and the Incompleteness of Interest Rate Convergence. **AU** Frankel, Jeffrey A.; Okongwu, Chudozie.

Osborn, Denise R.

TI Classical Business Cycles for G7 and European Countries. **AU** Artis, Michael J.; Kontolemis, Zenon G.; Osborn, Denise R.

Oved, Yosha

PD January 1995. **TI** Diversification and Competition: Financial Intermediation in a Large Cournot-Walras Economy. **AA** Brown University and Tel-Aviv University. **SR** Tel Aviv Sackler Institute of Economic Studies Working Paper: 3/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 35. **PR** no charge. **JE** D52, D82, G24, L13. **KW** Convergence. Diversification. Financial Intermediation. General Equilibrium. Risk Sharing.

AB Consider an economy under uncertainty where risk sharing is achieved through purchase of securities from partially diversified financial intermediaries who behave as Cournot competitors. When the economy is appropriately replicated, the Cournot-Walras equilibrium converges to the (Malinvaud) perfectly competitive equilibrium with no uncertainty. The price of securities in an r-replicated Cournot-Walras economy converges to the price in the no uncertainty, perfectly competitive economy at the rate 1/r as in a benchmark partial equilibrium Cournot market with no uncertainty. However, the rate of convergence of individual welfare is typically slower than in the benchmark market (i.e. slower than 1/r^2), and so is the rate of convergence of traded quantities. The cause of the slow convergence is the presence of uncertainty, not the general equilibrium nature of the model. An implication of the analysis is that in a sufficiently large economy, risk sharing through (imperfectly competitive) financial intermediaries is an almost perfect substitute for other forms of risk sharing. However, the slow rate of convergence of the welfare level suggests that the qualification "sufficiently large" cannot be taken lightly.

Overland, Jody

TI Saving and Growth with Habit Formation. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N.

TI Saving and Growth with Habit Formation. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N.

Owen, Ann

PD May 1995. **TI** Intergenerational Earnings Mobility, Inequality, and Growth. **AU** Owen, Ann; Weil, David N. **AA** Owen: Federal Reserve Board of Governors. Weil: Brown University. **SR** Brown University, Department of Economics Working Paper: 95/17; Department of Economics, Brown University, Providence, RI 02912. **PG** 48. **PR** no charge. **JE** J62, O15. **KW** Intergenerational Mobility. Inequality.

AB We examine a model in which per capita income, inequality, intergenerational mobility, and returns to education are all determined endogenously. Individuals earn wages depending on their ability, which is a random variable. They purchase an education with transfers received from their parents, and are subject to liquidity constraints. In the model, multiple equilibria are possible: countries with identical tastes and technologies can reach differing rates of mobility, inequality, and per capita income. Equilibria with higher levels of output also have lower inequality, higher mobility, and more efficient distribution of education.

Pagano, Marco

TI The Welfare Effects of Liquidity Constraints. **AU** Jappelli, Tullio; Pagano, Marco.

Papell, David H.

TI Slowdowns and Meltdowns: Post-War Growth Evidence from 74 Countries. **AU** Ben-David, Dan; Papell, David H.

TI Some Evidence on the Continuity of the Growth Process Among the G7 Countries. **AU** Ben-David, Dan; Papell, David H.

Park, Chan Su

TI Surprising Robustness of the Self-Explicated Approach to Customer Preference Structure Measurement. **AU** Srinivasan, V.; Park, Chan Su.

Parsons, George R.

PD April 1995. **TI** Incidental Consumption in Recreation Demand. **AU** Parsons, George R.; Wilson, Aaron J. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/03; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 10. **PR** not available. **JE** R13, R52, D11, D62. **KW** Regional Economics. Welfare. Recreation.

AB A theory for analyzing incidental consumption in a single site recreation demand model is presented. We show that incidental consumption on a recreation trip, such a visit to see friends or a visit to a second recreation site, can be treated as a complimentary good and analyzed using conventional theory. We also show that the analysis applies whether the side trips are incidental or joint. In a simple application we demonstrate that failing to account for incidental consumption appears to create little bias in valuing recreation sites.

PD March 1996. **TI** Choice Set Boundaries in a Random Utility Model of Recreation Demand. **AU** Parsons, George R.; Hauber, A. Brett. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 96/3; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 11. **PR** not available. **JE** D11, L83. **KW** Recreation. Choice Set. Random Utility.

AB Random Utility Models are commonly used the recreation demand literature to model the choice among a set of qualitatively different recreation sites. Often, due to computational or data constraints, analysts do not include all possible alternatives in the choice set. This research is concerned with choice set boundaries. In particular, we ask, "how far away from a person's home must a site be before it is no longer considered part of the choice set in estimation?" We examine this question by estimating a single model with varying choice set boundaries using a data set of recreational fishing activity in Maine. In this analysis, we show that there exists some threshold distance beyond which adding additional sites to the choice set has negligible effects on the estimation results.

Parsons, John E.

TI Auctions of Shares with a Secondary Market and Tender Offers. **AU** Mello, Antonio S.; Parsons, John E.

Paul, Thierry

TI Labor Adjustment and Gradual Reform: Is Commitment Important? **AU** Karp, Larry S.; Paul, Thierry.

Pearlman, Joseph

TI Can Delegation Be Counterproductive? The Choice of "Conservative" Bankers in Open Economies. **AU** Currie, David; Levine, Paul; Pearlman, Joseph.

Perloff, Jeffrey M.

TI The Optimal Suppression of a Low-Cost Technology by a Durable Goods Monopoly. **AU** Karp, Larry S.; Perloff, Jeffrey M.

TI Estimating the Size Distribution of Firms Using Government Summary Statistics. **AU** Golan, Amos; Judge, George; Perloff, Jeffrey M.

TI All it Takes is Confidence: Job Search Confidence and Farm Workers' Wages, Benefits, and Working Conditions. **AU** Gabbard, Susan; Perloff, Jeffrey M.

Persson, Torsten

PD February 1995. **TI** Double-Edged Incentives: Institutions and Policy Coordination. **AU** Persson, Torsten; Tabellini, Guido. **AA** Persson: University of Stockholm. Tabellini: IGIER. **SR** Centre for Economic Policy Research, Discussion Paper: 1141; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 58. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E61, E62, F33, F36, F42. **KW** Policy Coordination. Incentives. Monetary Policy. Fiscal Policy.

AB This paper illustrates some of the most important insights of the literature on international fiscal and monetary policy coordination. It notes that the analysis of international policy interactions is enriched by taking the incentives in the domestic policy process into account. These incentives can either be tied to credibility issues or to political institutions. The paper also focuses on the role of institutions that can enforce and support international cooperation. We discuss alternative task assignments between member countries and the central policy-making level, and alternative processes for collective decision making.

PD February 1995. **TI** Federal Fiscal Constitutions. Part II: Risk Sharing and Redistribution. **AU** Persson, Torsten; Tabellini, Guido. **AA** Persson: University of Stockholm. Tabellini: IGIER. **SR** Centre for Economic Policy Research, Discussion Paper: 1142; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D78, E62, H77. **KW** Redistribution. Fiscal Federalism. Voting.

AB The paper studies the political and economic determinants of inter- regional public transfers. It points to an important difference between two alternative federal fiscal constitutions. The paper shows that inter-regional transfers can be determined either by a federation-wide vote over a centralized social insurance system, or by bargaining over intergovernmental transfers. When regions are asymmetric, the federal social insurance system leads to a larger fiscal program.

Pesenti, Paolo A.

TI A Center-Periphery Model of Monetary Coordination and Exchange Rates Crises. **AU** Buiter, Willem H.; Corsetti, Giancarlo; Pesenti, Paolo A.

Petranov, Stefan

TI Banking in the Bulgarian Economy. **AU** Miller, Jeffrey B.; Petranov, Stefan.

Pieper, Paul J.

TI Would Reducing Tenure Probabilities Increase Faculty Salaries? **AU** Ehrenberg, Ronald G.; Pieper, Paul J.; Willis, Rachel A.

Pierce, Brooks

TI Using Establishment Size to Measure the Impact of Title VII and Affirmative Action. **AU** Carrington, William J.; McCue, Kristin; Pierce, Brooks.

Pines, David

PD November 1995. **TI** Multiple Private Goods in Clubs and Local Public Good Economies. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 37/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 22. **PR** no charge. **JE** D71, H41, H73. **KW** Private Goods. Clubs. Public Goods. Local.

AB This paper suggests a unified framework or explaining the superiority of a heterogeneous clubs (jurisdictions) structure when there are multiple private goods. This superiority of the heterogeneous over the homogeneous structure has bee observed by Wilson (1987) in the context of an economy with local public goods by Gilles and Scotchmer (1995) in the context of an economy with clubs. In the unified framework suggested in this paper, the two models are combined and reduced to a simple optimization problem. The reduced model is then used to illuminate the advantage and disadvantage of the heterogeneous jurisdiction structure vis-a-vis the homogeneous one. The advantage consists of the gains from trade between differentiated jurisdictions; the disadvantage being the loss from inefficient jurisdiction size. The unified framework is also useful in showing that earlier results regarding the possibility of decentralizing the optimal allocation in the case of one private good are equally applicable to the case of multiple private goods.

Pischke, Jorn-Steffen

TI Testing for Liquidity Constraints in Euler Equations with Complementary Data Sources. **AU** Jappelli, Tullio; Pischke, Jorn-Steffen; Souleles, Nicholas.

Pitt, Mark M.

PD November 1995. **TI** Estimating the Determinants of Child Health When Fertility and Mortality are Selective. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/38; Department of Economics, Brown University, Providence, RI 02912. **PG** 28. **PR** no charge. **JE** C34, I12, J13. **KW** Selection Bias. Health. Fertility. Infant Mortality. Sub-Saharan Africa.

AB This paper estimates the determinants of child mortality and child health allowing for the possibility that samples of children are choice- based, reflecting prior selective fertility and mortality behavior. Parameter identificant is the most serious practical problem in controlling for fertility and mortality selection. Identification is achieved by imposing a random-effects structure on the error correlation matrix for the set of fertility, mortality and health behaviors. Fertility selection is found significant in the determinants of mortality in all 14 Sub-Saharan Demographic and Health Surveys (DHS) data sets studied, and fertility and mortality selection is found significant in the determination of child height in Zambia.

PD November 1995. **TI** The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter? **AU** Pitt, Mark M.; Khandker, Shahidur. **AA** Pitt: Brown University. Khandker: The World Bank. **SR** Brown University, Department of Economics Working Paper: 95/39; Department of Economics, Brown University, Providence, RI 02912. **PG** 31. **PR** no charge. **JE** D13, I38, J16, O53 . **KW** Credit Programs. Program Evaluation. Bangladesh.

AB Group-based lending programs for the poor have become a focus of attention in the development community over the last several years. As many of these programs target women, an important research question is whether program participation significantly changes household behavior and whether the gender of the program participant matters. To date, there has been no comprehensive investigation of the impact of these credit programs on household behavior that has been sufficiently attentive to issues of endogeneity and self-selection. Using data from a special survey carried out in 87 rural Bangladeshi villages during 1991- 1992 this paper estimates the impact of participation by gender in three group-based credit programs, Grameen Bank, Bangladesh Rural Advancement Committee (BRAC), and Bangladesh Rural Development Board's (BRDB) Rural Development RD-12 program, on women's and men's labor supply, boy's and girl's schooling, expenditure and assets. The empirical method applied corrects for the potential bias arising from unobserved individual-, household- and village-level heterogeneity. The study uses a quasi- experimental survey design to provide statistical identification of program effects in a limited information maximum likelihood framework. The survey design covers one group of households which has the choice to enter a credit program and which may alter their behavior in response to the program, and a "control" group which is not given the choice of entering the program but whose behavior is still measured. Similarly, the identification of these programs impact by the gender of the participant is accomplished based on the comparison between groups of each gender with and without the choice to participate. A comparison of our econometric method with more naive approaches clearly indicates the importance of our attentiveness to endogeneity in evaluating these credit programs. We find that program credit has a significant effect on the well-being of poor households in Bangladesh and this effect is greater when women are the program participants. For example, annual household consumption expenditure, the most comprehensive measure available of program impact, increased 18 taka for every 100 additional taka borrowed by women from these credit programs, compared with 11 taka for men. This evidence suggests that credit may not be perfectly fungible within the household.

Plotnick, Robert D.

PD February 1995. **TI** Fixed Effect Estimates of Neighborhood Effects. **AU** Plotnick, Robert D.; Hoffman, Saul D. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/06; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 15. **PR** not available. **JE** R23, I32, C23. **KW** Neighborhood. Fixed Effects.

AB Using data from the Panel Study of Income Dynamics, we compare estimates from "standard" neighborhood models with those from fixed- effect models to examine the extent to which unobservable family characteristics bias estimates of neighborhood effects. We examine three outcomes for young adult women: whether a woman had a nonmarital birth as a teenager, whether she obtained any post-secondary education, and whether she received AFDC at age 25. Every statistically significant neighborhood variable in the cross-section models became insignificant in the fixed effect models or changed sign, while some that were insignificant became significant but with coefficients in directions contrary to expectation. These exploratory findings suggest that one should be cautious about accepting findings of significant neighborhood effects derived from cross-section models which do not account for the possible selection of the neighborhood.

Porteus, Evan L.

TI Manufacturer-Retailer Contracting Under a Unknown Demand Distribution. **AU** Lariviere, Martin A.; Porteus, Evan L.

Poterba, James

TI Tax Subsides to Employer-Provided Health Insurance. **AU** Gruber, Jonathan; Poterba, James.

Prados de la Escosure, Leandro

PD January 1995. **TI** Growth and Macroeconomic Performance in Spain, 1939-93. **AU** Prados de la Escosure, Leandro; Sanz, Jorge C. **AA** Prados de la Escosure: Universidad Carlos III, Spain. Sanz: Palacio de la Moncloa, Spain. **SR** Centre for Economic Policy Research, Discussion Paper: 1104; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 61. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** N14, O52. **KW** Spain. Economic Growth. Catch-Up. Autarchy. Trade Liberalization.

AB After presenting trends in aggregate performance within a comparative convergence framework, this paper explores institutional and macroeconomic features as the ultimate explanations of Spain's post-war growth performance. The following main phases are distinguished: the autarchy period (1939-59), the years of growth and delayed reconstruction (1959-75), the relative stagnation of the transition from Franco's dictatorship to democracy (1975-85), which ended with Spain's membership of the European Community and gave way to a short period of accelerating growth which ended abruptly with the recession of the early 1990s.

Prowse, Stephen

TI The Economics of the Private Equity Market. **AU** Fenn, George W.; Liang, Nellie; Prowse, Stephen.

Pudney, Stephen

TI Redistributive Policy in a Transition Economy: The Case of Hungary. **AU** Jarvis, Sarah; Pudney, Stephen.

Quah, Danny T.

PD March 1995. **TI** Empirics for Economic Growth and Convergence. **AA** London School of Economics. **SR** Centre for Economic Policy Research, Discussion Paper: 1140; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** C21, C22, C23, O41. **KW** Evolving Distributions. Galton's Fallacy. Convergence. Stochastic Kernel. Unit Root.

AB The convergence hypothesis has generated a huge empirical literature; this paper critically reviews some of the earlier key findings, clarifies their implications, and relates them to more recent results. Particular attention is devoted to interpreting convergence empirics. The main findings are: (1) The much-heralded uniform 2 per cent rate of convergence could arise for reasons unrelated to the dynamics of economic growth. (2) Usual empirical analyses -- cross-section (conditional) convergence regressions, time series modeling, panel data analysis -- can be misleading for understanding convergence; a model of polarization in economic growth clarifies those difficulties. (3) The data, more revealingly modeled, show persistence and immobility across countries: some evidence supports Baumol's idea of convergence clubs; some evidence shows the poor getting poorer, and the rich richer, with the middle class vanishing. (4) Convergence, unambiguous up to sampling error, is observed across US states.

Raff, Daniel M.G

PD April 1995. **TI** Quality-Adjusted Prices for the American Automobile Industry: 1906- 1940. **AU** Raff, Daniel M.G.; Trajtenberg, Manuel. **AA** Raff: University of Pennsylvania and National Bureau of Economic Research. Trajtenberg: Tel Aviv University and National Bureau of Economic Research. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 10/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 26. **PR** no charge. **JE** O33, L62, N72, L15. **KW** Automobiles. Price Indices. Quality Adjustment.

AB We apply conventional hedonic price methods to compute quality- adjusted prices for automobiles, from the early years of the industry until WWII. We gathered for that purpose highly detailed data on the technical attributes and prices of virtually every make/model marketed every other year over that period, including information on mechanical systems such as brakes, clutch and suspension. Reflecting the tremendous rate of entry of the earlier years, our data comprises an average of 600 different body-models per annum, for a total of over 11,000 observations. We find that quality-adjusted prices fell on average 5 percent per annum throughout the period. From 1906 to 1918 they fell much faster, averaging 11 percent per annum, about half the rate of decline in the quality-adjusted prices of micro-computers for a comparable period (1982-88). In terms of 1993 dollars, the quality- adjusted price of a typical automobile fell from over $52,000 in 1906, to about $8,000 by 1940. Sixty percent of the decline may be attributed to process innovations, the other 40 percent to product innovations. Combining these figures with post WWII hedonic indices, we find that most of the decline in quality-adjusted prices occurred up to the 1920s, some more took place until 1940, and very little since then and until the mid 1980s.

Rahman, Atiqur

TI Technological Convergence and International Trade. **AU** Ben-David, Dan; Rahman, Atiqur.

Rajan, Ashvin V.

PD March 1996. **TI** Generic Properties of the Core and Equilibria of Pure Exchange Economies. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 363; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 12. **PR** no charge. **JE** D51, C62. **KW** Large Economy. Core Allocation. Banach Manifold. Fredholm Map. Density Theorem.

AB We present a unified mathematical framework within which pure exchange economies with a finite set of agents, as well as those with a continuum of traders as mathematically modeled by Aumann (1964), can be analyzed simultaneously. We prove that the number of equilibrium price vectors of our economies are generically finite. Hence, for markets with a continuum of traders, the equilibrium allocations (which by the celebrated theorem of Aumann (1964) coincide with the core allocations) are finite for an open dense set of such markets. This presents a limiting case result that complements similar asymptotic theorems about cores of large economies that have been proved by Bewley (1973), and Dierker (1975). If we assume that the measure on the space of agents is one with a finite number of atoms of equal weight, our reasoning recovers the classical theorems proved about equilibria by Debreu (1970) for economies with a finite number of agents.

PD April 1996. **TI** A Remark on the Equilibrium Set of Pure Exchange Economies. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 367; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 7. **PR** no charge. **JE** D51, C62. **KW** Large Economies. Equilibrium Set.

AB We present a unified mathematical framework within which, among others, pure exchange economies with a finite set of agents, as well as those with a continuum of traders may be studied simultaneously. We prove that the reasoning presented by Balasko (1975) on the equilibrium set for finite economies generalizes very naturally to our setting. His results may therefore be recovered as a special case of those presented in this note.

Rajan, Raghuram G.

TI The Paradox of Liquidity. **AU** Myers, Stewart, C.; Rajan, Raghuram G.

Ralston, Katherine

PD October 1995. **TI** Young Children's Egg Consumption: Determinants and Policy Implications. **AU** Ralston, Katherine; Lane, Sylvia. **AA** Ralston: USDA/ERS/RTD, Washington, D.C. Lane: University of California, Berkeley. **SR** University of California, Berkeley Department of Agricultural and Resource Economics and Policy Working Paper: 744; Department of Agricultural and Resource Economics and Policy, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 30. **PR** $7.50 Domestic; $15.00 International Surface Rate. **JE** D11, J13, Q11. **KW** Young Children. Egg Consumption. Diet. Health.

AB Widespread concerns about cholesterol have resulted in lowering consumers' egg consumption. Children one to five years of age consume more eggs if their mother/caretakers eat more eggs, and they consume fewer eggs if their mother/caretakers have higher levels of education or if the children attend a child-care facility serving meals. Older children eat fewer eggs than younger children. Mother/caretakers' egg consumption is negatively affected by income levels and educational levels and positively affected by being non-Caucasian. Children's egg consumption is less responsive to factors that increase egg consumption than are adults' intakes. Children's mean cholesterol intake levels are higher than recommended levels for non-Caucasians, as opposed to Caucasians, and for all of those in low-income groups-the same groups whose egg consumption is highest when compared with those of other groups. The study's results indicate that there is a clear unmet need for nutrition education for mother/caretakers (and notably for Food Stamp Program participants), who are in lower-income and frequently less-educated groups and who, under the existing programs, receive very little or no education focused on healthful nutrition for young children. WIC is an appropriate vehicle for lessening cholesterol intake of young children in the highest-risk cordons for succumbing to premature arteriosclerosis.

Rama, Martin

PD February 1995. **TI** Endogenous Distortions in Product and Labour Markets. **AU** Rama, Martin; Tabellini, Guido. **AA** Rama: The World Bank. Tabellini: IGIER. **SR** Centre for Economic Policy Research, Discussion Paper: 1143; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 36. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, J31, J51. **KW** Minimum Wage. Lobbying. Social Pact.

AB This paper uses the common agency approach to analyze the joint determination of product and labor market distortions in a small (developing) open economy. Capital owners and union members lobby the government on both tariffs and minimum wages, while other factors of production are not organized. The paper shows that product and labor market distortions move in the same direction in response to changes in economic and political parameters, and that their level is not modified by social pacts between capital and labor. It also shows that conditionality by foreign agencies should target product market distortions, not labor market distortions.

Razin, Assaf

PD January 1995. **TI** Resisting Migration: Wage Rigidity and Income Distribution. **AU** Razin, Assaf; Sadka, Efraim. **AA** Tel-Aviv University. **SR** Centre for Economic Policy Research, Discussion Paper: 1091; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 18. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F22, H11, I38, J61. **KW** International Migration. Human Capital. Labor Skills. Income Taxes. Public Services.

AB Like any trade activity, migration tends to generate gains to all parties involved -- the migrants as well as the native-born population. With a mal-functioning labor market, however, migration will exacerbate the imperfections in the market. Consequently, it may lead to losses to the native-born population which are typically quite sizable. Another economic problem raised by migration is the additional toll imposed on the welfare-state income-distribution institutions. Being unable to exclude migrants from the various entitlement programs and public services, the modern welfare state can find migration rather costly. These two economic considerations may help explain the resistance to migration despite the pure gains-from-trade benefits created by it. Immigration could be more beneficial to the native-born population when labor markets are better functioning and the welfare programs are less comprehensive.

PD May 1995. **TI** Factor Mobility and Income Growth: Two Convergence Hypotheses. **AU** Razin, Assaf; Yuen, Chi-Wa. **AA** Razin: Tel Aviv University and National Bureau of Economic Research. Yuen: University of Hong Kong. **SR** National Bureau of Economic Research, Working Paper: 5135; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** $5.00. **JE** F21, J61, O41. **KW** Capital Mobility. Growth Rate. Labor Flows. Knowledge Spillover.

AB While technologies and policy fundamentals are presumably different internationally, inducing differences in growth rates, capital mobility is shown to be a powerful force in achieving complete growth "rate" equalization across countries. We provide evidence in support of this effect, showing that restrictions on capital flows tend to make individual country growth rates more divergent. In the context of regional growth, however, labor mobility is shown to be capable of generating income "level" equalization across regions in the presence of knowledge spillovers. Some supporting evidence is found for this effect, showing that restrictions on labor flows tend to make individual region/country per capita income more divergent.

PD May 1995. **TI** Public Debt in Israel: Policy Lessons. **AU** Razin, Assaf; Sadka, Efraim. **AA** Tel-Aviv University. **SR** Tel Aviv Sackler Institute of Economic Studies Working

Paper: 15/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 37. **PR** no charge. **JE** E62, E65, H63. **KW** Budget Discipline. Monetary Accommodation. Deficit Gamble. Tax Smoothing. Debt Neutrality.

AB The main policy lesson that could be drawn from the Israeli experience is that the absence of budget discipline, coupled with an almost inevitable monetary accommodation, will eventually fuel an inflationary process that could run out of control. The huge budgetary expansion in Israel and the associated monetary expansion was initiated by wars and severe terms of trade shocks (the oil crises). Inflation undermined the tax system and tilted the income distribution in favor of capital and against labor. Even worse, the inflation-induced tax concessions to capital were highly distortionary without having any positive effect on growth. Several attempts to curb inflation without fiscal consolidation were made but proved futile. A critical element in the successful stabilization policy of 1985 was the elimination of the fiscal deficit. The restoration of the tax system in a background of a relatively stable economy proved beneficial to labor. Also of interest, the budgetary expansion associated with the absorption of the massive wave of immigration from the former Soviet Union was not reflected in growth of public debt in a relative sense even though the tax burden was not raised. This surprising outcome occurred because output was capable of responding swiftly to the increased aggregate demand, by the utilization of excess capacity of capital (residual of the post- stabilization recession) and high labor force participation rates among the newcomers. Even though a casual eyeballing overview of the data may suggest the chance of a gain in the so-called deficit gamble (owing to the differential between the growth rate and the interest rate), we caution the reader. Our analysis of the economic distortions and social evils of weak fiscal discipline, and the effect of a deficit policy on lowering the chance of winning in the deficit gamble should serve as a clear warning against such a gamble.

Rebelo, Sergio
TI Capital Utilization and Returns to Scale. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio.

Reenen, John Van
PD November 1994. **TI** The Creation and Capture of Rents: Wages and Innovation in a Panel of UK Companies. **AA** Institute of Fiscal Studies, UK. **SR** Centre for Economic Policy Research, Discussion Paper: 1071; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 17. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** J51. O33. **KW** Wages. Innovation. Rent Sharing.

AB This paper examines the impact of technological innovation on wages using a panel of UK manufacturing firms. We utilize a headcount measure of major innovation between 1945-83 combined with share price and accounting information. Innovating firms are found to have higher average wages, but rival innovation tends to depress own wages. This appears consistent with a model where wages are partly determined by a sharing in the rents generated by innovation. In other words, innovation may be a good instrument for proxies for rents such as profitability, quasi-rents or Tobin's q. Instrumental variable estimates of the elasticity between wages and quasi-rents are about 0.3, remarkably close to the recent findings of Abowd and Lemieux (1993).

Rees, Hedley
TI Lifetime Jobs and Transient Jobs: Job Tenure in Britain 1975-91. **AU** Burgess, Simon; Rees, Hedley.

Reinhart, Carmen M.
TI The Twin Crises: The Causes of Banking and Balance-of-Payments Problems. **AU** Kaminsky, Graciela L.; Reinhart, Carmen M.

Rendleman, Richard J.
TI Accounting for Financial Instruments: An Option Pricing-based Approach to Measuring Corporate Debt Components. **AU** Barth, Mary E.; Landsman, Wayne R.; Rendleman, Richard J.

Rhoades, Stephen A.
PD January 1996. **TI** Bank Mergers and Industrywide Structure, 1980-94. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System: 169; Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 29. **PR** no charge. **JE** G21, G28. **KW** Bank Mergers. Banking Industry. Restructuring.

AB This paper presents data on all bank mergers for the period from 1980 to 1994, including the number, sizes, locations, and types for the more than 6,300 bank mergers and the indentification of the largest mergers. The paper also briefly examines changes in structure and performance of the banking industry, including data on branches, ATMs, and bank stock prices, and makes some comparisons of data from this period with data from 1960 to 1982, a period covered in an earlier study. The purpose of this basically descriptive paper is fourfold: (1) to bring together in one place data on all bank mergers from 1980 through 1994; (2) to discuss the patterns and trends in bank mergers; (3) to place bank mergers in the context of industrywide structure and performance during the period; and (4) possibly to generate some ideas about bank strategy, about research into the causes and effects of bank mergers, and about the implications of bank merger policy for future banking structure.

Robinson, Sherman
TI The Role of Defense Cuts in the California Recession: Computable General Equilibrium Models and Interstate Factor Mobility. **AU** Hoffmann, Sandra; Robinson, Sherman; Subramanian, Shankar.

Rodrik, Dani
PD December 1994. **TI** Developing Countries After the Uruguay Round. **AA** Columbia University. **SR** Centre for Economic Policy Research, Discussion Paper: 1084; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 45. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, F15. **KW** Uruguay Round. Trade Policy. Developing Countries.

AB The Uruguay Round marks an important turning point for the developing countries. The three core agreements on which the new World Trade Organization (WTO) is based present a remarkable range of obligations and responsibilities for a set of countries that were effectively outside any multilateral discipline on trade matters. Meanwhile, the few concrete gains that accrue to developing countries, such as the phasing out of the MFA, are suspiciously backloaded. This is the wrong way to read the significance of the Uruguay Round for them, however. First of all, there are a number of important ways in which the Uruguay Round agreements promise to strengthen multilateral discipline in world trade. This is especially true in the area of dispute settlement. Second, since taking advantage of international trade is part and parcel of good development strategy, most of the developing country concessions need to be entered on the positive side of the balance sheet, and not viewed as a liability. Finally, there may be some subtle ways in which the Uruguay Round agreements can help developing country governments built better structures of governance at home to enhance the performance of their economies in areas that go beyond trade. The real threats to developing countries lie in the post-Uruguay agenda, in the demands for upward harmonization in the areas of labor and environment. A well-designed social safeguards clause will not necessarily be inimical to the interests of developing countries, and it may forestall the emergence of a new set of "grey area" measures outside of the WTO.

PD January 1995. **TI** The Dynamics of Political Support for Reform in Economies in Transition. **AA** Columbia University. **SR** Centre for Economic Policy Research, Discussion Paper: 1115; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 32. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D72, J60, P21. **KW** Transition. Political Economy. Employment.

AB This paper considers a simple model of economic transition to analyze the dynamics of preferences over economic policy. I consider an economy with two sectors: a high-productivity private sector, which initially employs a small share of the economy's work-force, and a low-productivity state sector where the majority of the population is employed at the outset. In the early stages of the transition, the private sector expands at a rate that is lower than the rate at which the state sector is contracting, with the result that unemployment first rises and then falls. The government's policy consists of a subsidy to the state sector which had the effect of slowing down the transition. The analysis focuses on the dynamic evolution of worker's preferences over the level of the subsidy. A worker in the private sector always prefers the lowest possible subsidy to the state sector. The same is true of an unemployed worker as well, as the subsidy only reduces the number of new jobs created without reducing the number of job seekers. But state-sector workers have ambiguous feelings over reform strategy and their preferences change over time. In particular, even if state- sector workers prefer shock therapy at the outset, they will always want to slow the reforms down at a later stage. The reason is that the probability of finding a higher-paying private-sector job declines as the transition unfolds.

PD June 1995. **TI** Why is there Multilateral Lending? **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5160; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 49. **PR** $5.00. **JE** F32, F33, F34. **KW** Multilateral Lending. Investment Environment. Information. Political Influence.

AB Why should multilateral lending exist in a world where private capital markets are well developed and governments have their own bilateral aid programs? If lending by the World Bank, IMF, and regional development banks has an independent rationale, it must rest on advantages generated by the multilateral nature of these institutions. There are in principle two such advantages. First, since information on the quality of investment environments in different countries is in many ways a collective good, multilateral agencies are in a better position to internalize the externalities that may arise. This creates a rationale for multilateral lending in terms of "information provision", particularly in terms of monitoring government policies in recipient countries. Second, as long as multilateral agencies retain some degree of autonomy from the governments that own them, their interaction with recipient countries, while official in nature, can remain less politicized than inter-governmental links. This in turn endows multilateral agencies with an advantage in the exercise of "conditionality", (that is, in lending that is conditional on changes in government policies). Neither of these two potential advantages of multilateral lending has much to do with lending per se. However, multilateral lending may be required to make these agencies' tasks incentive compatible. The empirical analysis reveals little evidence that multilateral lending has acted as a catalyst for private capital flows.

Rogers, Carol Ann

TI Optimal Stabilization Policy in the Presence of Learning by Doing. **AU** Martin, Philippe; Rogers, Carol Ann.

TI Stabilization Policy, Learning by Doing, and Economic Growth. **AU** Martin, Philippe; Rogers, Carol Ann.

Rogers, John H.

PD January 1995. **TI** Real Shocks and Real Exchange Rates in Really Long-Term Data. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 493; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 38. **PR** no charge. **JE** F31. **KW** Exchange Rates. Monetary Shocks. Vector Autoregression.

AB There is little consensus concerning the sources of fluctuations in real exchange rates. In this paper I assess the nature of the shocks that drive the real U.S. dollar - U.K. pound exchange rate, analyzing 130 years of data. I first show that wars, which are examples of a (transitory) real shock, are significant. I next use an alternative empirical approach, in which I identify various types of real and nominal shocks. I find that output shocks and monetary shocks account for approximately the same percentage of the variance of the real exchange rate over short horizons. The monetary shock is decomposed into monetary base and money multiplier shocks and the output shock is decomposed into supply and demand shocks. Essentially all of the effect of the combined output shock is due to the demand shock. The effect of the monetary shock is accounted for by both money multiplier shocks and monetary base shocks in roughly equal amounts. Thus, the paper suggests that the contributions of real and monetary shocks are roughly equal overall, while shedding light on the nature of those shocks.

TI Government Budget Deficits and Trade Deficits: Are Present-Value Constraints Satisfied in Long-Term Data? **AU** Ahmed, Shaghil; Rogers, John H.

PD January 1995. **TI** Convertibility Risk, Default Risk, and the Mexdollar Anomally. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 495; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 10. **PR** no charge. **JE** F31, F41. **KW** Currency Substitution. Convertibility Risk. Mexdollars. Depreciation.
AB In Rogers (1992a,b) I put forth the convertibility risk hypothesis in order to explain the anomalous negative relationship between the expected rate of Mexican peso depreciation and the ratio of Mexdollars to peso denominated demand deposits. Recently, Gruben and Welch (1994) examine the effect of deteriorating bank loan quality on the variables I consider. Using a cointegration framework, the authors find (i) a negative relationship between non-performing loans and the dollarization ratio and (ii) the conventional positive relationship between expected peso depreciation and dollarization. The first result suggests an additional factor influencing money demand in Mexico. The second result is evidence against my convertibility risk hypothesis. Further analysis indicates that there is some evidence in favor of Gruben and Welch's first result, but that the preponderance of evidence runs counter to their second result.

TI How Wide is the Border? **AU** Engel, Charles; Rogers, John H.

TI International Stock Price Spillovers and Market Liberalization: Evidence from Korea, Japan, and the United States. **AU** Kim, Sang W.; Rogers, John H.

TI Political Competition, Casual Relationships Between Taxes and Spending, and Their Influence on Government Size: Evidence From State- Level Data. **AU** Lim Rogers, Diane; Rogers, John H.

PD February 1995. **TI** Real Exchange Rate Movements in High Inflation Countries. **AU** Rogers, John H.; Wang, Ping. **AA** Rogers: Board of Governors of the Federal Reserve System. Wang: Pennsylvania State University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 501; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 32. **PR** no charge. **JE** F31, F41. **KW** Exchange Rates. Nominal Shocks. Real Shocks. Vector Autoregression.
AB We empirically assess the sources of fluctuations in the real exchange rates of four high inflation countries, for which monetary shocks are generally believed to be predominant. In a benchmark model we identify fiscal, monetary, and output shocks based on a general- equilibrium optimizing model. We then estimate two alternatives extensions. In the first, we decompose the output shock into supply and demand disturbances; in the second, the monetary shock is further decomposed into money supply and nominal exchange rate disturbances. Monetary shocks are found to be generally significant. Real shocks, especially those associated with government policy restrictions on the flow of currency, income from foreign investments, capital, and/or goods, are uniformly more influential however. The paper suggests that analyses of real exchange rates in high inflation economies using models emphasizing monetary shocks and sticky prices could be improved by not neglecting real shocks.

TI Regional Patterns in the Law of One Price: The Roles of Geography vs. Currencies. **AU** Engel, Charles; Rogers, John H.

TI Monetary Policy in the End-Game to Exchange-Rate Based Stabilizations: The Case of Mexico. **AU** Kamin, Steven B.; Rogers, John H.

Rogoff, Kenneth

TI Exchange Rate Dynamics Redux. **AU** Obstfeld, Maurice; Rogoff, Kenneth.

TI The Law of One Price Over 700 Years. **AU** Froot, Kenneth A.; Kim, Michael; Rogoff, Kenneth.

Roland, Gerard

TI Defensive and Strategic Restructuring in Central European Enterprises. **AU** Grosfeld, Irena; Roland, Gerard.

Rose, Andrew K.

TI Explaining Forward Exchange Bias. **AU** Lyons, Richard K; Rose, Andrew K.

TI Speculative Attacks on Pegged Exchange Rates: An Empirical Exploration with Special Reference to the European Monetary System. **AU** Eichengreen, Barry; Rose, Andrew K.; Wyplosz, Charles.

TI Is There a Safe Passage to EMU? Evidence On Capital Controls and a Proposal. **AU** Eichengreen, Barry; Rose, Andrew K.; Wyplosz, Charles.

TI Fixes: Of the Forward Discount Puzzle. **AU** Flood, Robert P.; Rose, Andrew K.

TI A Panel Project on Purchasing Power Parity: Mean Reversion Within and Between Countries. **AU** Frankel, Jeffrey A.; Rose, Andrew K.

TI Currency Crashes in Emerging Markets: An Empirical Treatment. **AU** Frankel, Jeffrey A.; Rose, Andrew K.

Rosen, Richard

TI Banks And Derivatives. **AU** Gorton, Gary; Rosen, Richard.

Rosenberg, Joshua V.

TI GARCH Gamma. **AU** Engle, Robert F.; Rosenberg, Joshua V.

Rouse, Cecilia

TI Intraschool Variation in Class Size: Patterns and Implications. **AU** Boozer, Michael; Rouse, Cecilia.

Rubinstein, Ariel

PD August 1995. **TI** Naive Strategies in Competitive Games. **AU** Rubinstein, Ariel; Tversky, Amos; Heller, Dana. **AA** Rubinstein: Tel Aviv University. Tversky and Heller: Stanford University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 23/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 12. **PR** no charge. **JE** C72, C91. **KW** Zero Sum. Experiments. Game Theory.
AB We investigate the behavior of players in a two-person competitive game. One player "hides" a treasure in one of four locations, and the other player "seeks" the treasure in one of

these instructions. The seeker wins if her choice matches the hider's choice; the hider wins if it does not. According to the classical game-theoretic analysis, both players should choose each item with probability of .25. In contrast, we found that both hiders and seekers tended to avoid the endpoints. This bias produces a positive correlation between the players' choices, giving the seeker a considerable advantage over the hider.

Rubio, Santiago J.

TI A Model of Optimal Water Reserves Under Climate Change Uncertainty. **AU** Fisher, Anthony C.; Rubio, Santiago J.

Sacheti, Sandeep

TI International Trade and the Internalization of Environmental Damages. **AU** Karp, Larry S.; Dumas, Chris; Koo, Bonwoo; Sacheti, Sandeep.

TI Limited Cooperation in International Environmental Agreements. **AU** Karp, Larry S.; Sacheti, Sandeep.

Sachs, Jeffrey

PD June 1995. **TI** The Collapse of the Mexican Peso: What Have We Learned? **AU** Sachs, Jeffrey; Tornell, Aaron; Velasco, Andres. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 4142; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** $5.00. **JE** F31, F34. **KW** Mexican Peso. Illiquidity. Foreign Investment. Devaluation.

AB In the first quarter of 1995, Mexico found itself in the grip of an intense financial panic. Foreign investors fled Mexico despite very high interest rates on Mexican securities, an undervalued currency, and financial indicators that pointed to long-term solvency. The fundamental conditions of the Mexican economy cannot account for the entire crisis. The crisis was due to unexpected shocks that occurred in 1994 and the inadequate policy response to those shocks. In the aftermath of the March assassination, the exchange rate experienced a nominal devaluation of around 10 percent and interest rates increased by around 7 percentage points. However, the capital outflow continued. The policy response to this was to maintain the exchange rate rule and to prevent further increases in interest rates by expanding domestic credit and by converting short-term peso-denominated government liabilities (Cetes) falling due into dollar-denominated bonds (Tesobonos). A fall in international reserves and an increase in short-term dollar-denominated debt resulted. The government simply ended up illiquid, and therefore financially vulnerable. Illiquidity exposed Mexico to a self-fulfilling panic.

Sadka, Efraim

TI Resisting Migration: Wage Rigidity and Income Distribution. **AU** Razin, Assaf; Sadka, Efraim.

TI Public Debt in Israel: Policy Lessons. **AU** Razin, Assaf; Sadka, Efraim.

Safra, Zvi

TI Individual Sense of Justice and Social Welfare Functions. **AU** Karni, Edi; Safra, Zvi.

Sako, Mari

PD March 1995. **TI** Suppliers' Associations in the Japanese Automobile Industry: Collective Action for Technology Diffusion. **AA** London School of Economics. **SR** Centre for Economic Policy Research, Discussion Paper: 1147; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 33. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** L14, L22, L23, L62, O32. **KW** Japan. Inter-Firm Relations. Business Associations. Automobiles.

AB This paper analyzes the structure and the functions of suppliers' associations (kyoryokukai) in the Japanese automobile industry. Much attention has been paid to bilateral assembler-supplier relationships as a source of Japanese industrial competitiveness. This paper argues, however, that the hitherto neglected area of inter-supplier coordination in technology diffusion is at least as important as the bilateral assembler-supplier relationship in accounting for the overall performance of the Japanese automotive industry. On the basis of company visits and a large-scale survey of first-tier suppliers conducted by the author, the paper analyzes the reasons why the suppliers' associations were established, the reasons why they continue to exist today, and their effects on economic performance.

Sala-i-Martin, Xavier

PD November 1994. **TI** Regional Cohesion: Evidence and Theories of Regional Growth and Convergence. **AA** Yale University. **SR** Centre for Economic Policy Research, Discussion Paper: 1075; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 38. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** O41, O47, O51, O52, O53. **KW** Regional Growth. Regional Cohesion. Neoclassical Growth. Capital Mobility. Technological Diffusion.

AB After arguing that the concepts of beta-convergence and sigma- convergence are independently interesting, this paper extends the empirical evidence on regional growth and convergence across the Untied States, Japan, and five European nations. We confirm that the estimated speeds of convergence are surprisingly similar across data sets; regions tend to converge at a speed of approximately 2 per cent per year. We also show that the inter-regional distribution of income in all countries has shrunk over time. We then argue that, among the proposed potential explanations of this phenomenon, the one-sector neoclassical growth model and the hypothesis of technological diffusion seem to be the only ones which survive scrutiny.

TI Quality Improvements in Models of Growth. **AU** Barro, Robert J.; Sala-i-Martin, Xavier.

TI A Labour-Income-Based Measure of the Value of Human Capital: An Application to the States of the United States. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier.

TI Technological Diffusion, Convergence, and Growth. **AU** Barro, Robert J.; Sala-i-Martin, Xavier.

Salant, David

TI Adoptions and Orphans in the Early Microcomputer Market. **AU** Gandal, Neil; Greenstein, Shane M.; Salant, David.

Samwick, Andrew A.

TI The Nature of Precautionary Wealth. **AU** Carroll, Christopher D.; Samwick, Andrew A.

PD July 1995. **TI** Tax Shelters and Passive Losses After the Tax Reform Act of 1986. **AA** Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5171; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 48. **PR** $5.00. **JE** H21, H24. **KW** Tax Shelters. Tax Reform. Passive Loss Rules.
AB The precipitous decline in tax sheltered investments after the Tax Reform Act of 1986 (TRA) is widely attributed to the passive loss rules. These rules disallowed losses from activities in which the taxpayer did not materially participate as a current deduction against all sources of income except for other passive activities. This paper demonstrates instead that the role of the passive loss limitations was secondary to that of other reforms enacted by TRA, most importantly the repeal of the investment tax credit and the long-term capital gain exclusion. These other reforms not only lowered after-tax rates of return on tax sheltered investments but also eliminated the positive correlation between the investor's marginal tax rate and the investment's after-tax rate of return. As a result, high income taxpayers ceased to be the natural clientele for legitimate tax shelters after TRA. The passive loss rules were more effective in curtailing the use of "abusive" tax shelters; however, it is shown that a more narrowly focused restriction on seller financing of tax sheltered investments could have accomplished the same goal with much less scope for discouraging productive economic investments.

Sanz, Jorge C.

TI Growth and Macroeconomic Performance in Spain, 1939-93. **AU** Prados de la Escosure, Leandro; Sanz, Jorge C.

Sapir, Andre

PD January 1995. **TI** Trade Liberalization and the Harmonization of Social Policies: Lessons from European Integration. **AA** ESCARE. **SR** Centre for Economic Policy Research, Discussion Paper: 1114; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 37. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F13, F15, J38. **KW** Regional Integration. EC. Social Policies.
AB The paper analyzes the debate on the relationship between trade liberalization and the harmonization of social policies in the context of European integration. It is divided into two parts. The first shows that harmonization of social policies was not imposed in the 1960s and 1970s as a pre-condition for trade liberalization inside the Community mainly due to favorable economic conditions. The second part examines the demand for and the actual measures in favor of harmonizing social policies which have increasingly occurred in the Community since the mid-1970s. It is contended that this new regime corresponds to greater heterogeneity and slower growth inside the Community. Renewed efforts to liberalize intra-EC trade in the mid-1980s also played a significant part in the shift towards harmonization.

Sargent, Thomas J.

TI Neural Network for Encoding and Adapting in Dynamic Economics. **AU** Cho, In-Koo; Sargent, Thomas J.

Sauer, Robert M.

PD August 1996. **TI** Job Mobility and the Market for Lawyers. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 28/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 25. **PR** no charge. **JE** C35, C41, J41, J44. **KW** Job Mobility. Lawyers. Attorneys.
AB This paper studies the life cycle career choices of several cohorts of law school graduates from the University of Michigan. The model assumes that these graduates act according to the optimal solution of a dynamic optimization problem in which they sequentially choose among five employment sectors. The employment sectors are differentiated by pecuniary and nonpecuniary returns, promotion and dismissal probabilities, and the extent of transferability of human capital. The estimation of the model reveals that a self-selection mechanism based on unobserved heterogeneity in abilities and expected future returns plays a critical role in reproducing the sector-specific nonmonotonic separation hazards observed in the data. The underlying self-selection mechanism also has important implications for policy interventions in the market for lawyers, such as loan-forgiveness programs.

Sauernheimer, Karlhans

TI The Equilibrium Real Exchange Rate of Germany. **AU** Stein, Jerome L.; Sauernheimer, Karlhans.

Schaffer, Mark E.

PD March 1995. **TI** Government Subsidies to Enterprises in Central and Eastern Europe: Budgetary Subsidies and Tax Arrears. **AA** London School of Economics. **SR** Centre for Economic Policy Research, Discussion Paper: 1144; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 47. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E62, H29, H32, P43. **KW** Central Europe. Eastern Europe. Subsidies. Tax Arrears. Financial Distress.
AB This paper analyses the distribution and allocation of budgetary subsidies and tax arrears in Central and Eastern Europe. Budgetary subsidies are relatively small in aggregate, highly sector specific, and the manufacturing sector receives few of them. Tax arrears, by contrast, are a significant problem, and the paper argues they can be considered a from of government subsidy. Data for the various Visegrad countries suggest that the total stock of tax arrears is on the order of 5-10 per cent of GDP, the annual flow of tax arrears is around 2 per cent of GDP, and the annual flow of tax arrears to the manufacturing sector is around 1 per cent of GDP. Survey data from Hungary and Poland show that tax arrears are concentrated in a small number of low profitability firms; the main correlate of tax arrears is low profitability, and the flow of new tax arrears is the main financing that enables these very unprofitable firms to continue to operate.

Schmeidler, David

TI Knowledge of Justice. **AU** Karni, Edi; Schmeidler, David.

Schoenbaum, Michael

TI Race and Education Differences in Disability Status and Labor Force Attachment. **AU** Bound, John; Schoenbaum, Michael; Waidmann, Timothy.

Schwartz, Aba

PD May 1995. **TI** The Interrelation of the Time Series of Wage and Employment at the Firm Level, Common Features and Contrasts. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 13/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 12. **PR** no charge. **JE** J21, J31, C22. **KW** Wages. Employment Dynamics. Granger Causality. Futures Rate.

AB The annual series of the real wage of high aggregates of firms are highly correlated and display a persistent hierarchy. Correspondingly these wage series are only weakly related to the corresponding annual series of employment levels. The deviations of the wage series from exact proportionality increases as the data is disaggregated over time and over firms, thus increasing the portion of the group's idiosyncratic dynamic evolution of wages. The idiosyncratic portion of the evolution of wages at the firm level for the quarterly (and monthly) data is significantly interrelated to the corresponding idiosyncratic evolutions of employment levels. The evidence from the sample used in this study suggests that the series of employment levels causes the corresponding series of wage and that the adjustments are instantaneous. The firms differ in the direction of the response of their wage to their employment level according to their group affiliation.

Seidman, Laurence S.

TI The Japan-U.S. Math Score Gap: Quartiles, Top 10 Percent, and Top 5 Percent. **AU** Lewis, Kenneth A.; Seidman, Laurence S.

PD December 1995. **TI** Housing Under a Personal Consumption Tax. **AU** Seidman, Laurence S.; Lewis, Kenneth A. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/13; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 14. **PR** not available. **JE** R21, H21, H22. **KW** Sales Tax. Consumption Tax. Housing. Real Estate.

AB Whether to convert the income tax to a personal cash-flow consumption tax will soon be debated in Congress. Analysts agree that a satisfactory treatment of housing poses a serious challenge. In this paper, we investigate the consequences of alternative tax rules for housing by performing numerical simulations in a stylized economy to illuminate the problems that arise from these tax rules. We show that prepayment with both mortgage and downpayment spreading, deferral, and capital gain/loss inclusion is a reasonably satisfactory tax rule that approximates the imputation ideal. All components of this rule are necessary to achieve an acceptable result. Additional problems may well occur in a more complex economy.

PD December 1995. **TI** Transitional Protection During Conversion to a Personal Consumption Tax. **AU** Seidman, Laurence S.; Lewis, Kenneth A. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/14; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 13. **PR** not available. **JE** H21, H22, H24. **KW** Income Tax. Sales Tax. Consumption. Numerical Simulation.

AB This paper constructs a transitional protection rule for conversion of the income tax to a personal consumption tax and tests it in five stylized life cycle economies (Identical, Pension, Bequest, Spender, and Lorenz) by performing numerical simulations. In the absence of a protection rule, older cohorts are severely harmed by conversion. With the rule, this harm is substantially reduced while at the same time the benefits of conversion to young and future cohorts are reduced but remain positive. The paper provides several lessons for the design of conversion legislation.

TI An Optimal Greenhouse Tax in an Optimal Growth Model. **AU** Lewis, Kenneth A.; Seidman, Laurence S.

TI Conversion To a Consumption Tax, Heterogeneity, and Aggregate Saving. **AU** Lewis, Kenneth A.; Seidman, Laurence S.

Serrano, Roberto

TI Negotiations With Side-Deals. **AU** Baliga, Sandeep; Serrano, Roberto.

TI Feasible Implementation of Taxation Methods. **AU** Dagan, Nir; Serrano, Roberto; Volij, Oscar.

PD July 1995. **TI** Reinterpreting the Kernel. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/22; Department of Economics, Brown University, Providence, RI 02912. **PG** 26. **PR** no charge. **JE** C71, C72, C78. **KW** Kernel. Consistency. Bargaining.

AB The reduced game relevant for the consistency of the prekernel is used to reinterpret this solution concept in a way that makes it independent of interpersonal utility comparisons. Based on this reinterpretation, a non-cooperative model is presented that yields in stationary subgame perfect equilibria the prekernel (kernel) for the class of monotonic TU games. Next, we apply the same non-cooperative model to more general coalitional games. When the underlying coalitional game is a pure bargaining problem, the model yields the Nash solution. If it is a general NTU game, a natural extension of the kernel arises. Thus, the kernel is obtained as the set of payoffs where the relevant bargaining range between every pair of players is split in half.

PD July 1995. **TI** Decentralized Information and the Walrasian Outcome: A Pairwise Meetings Market with Private Values. **AU** Serrano, Roberto; Yosha, Oved. **AA** Serrano: Brown University. Yosha: Brown University and Tel-Aviv University. **SR** Brown University, Department of Economics Working Paper: 95/24; Department of Economics, Brown University, Providence, RI 02912. **PG** 28. **PR** no charge. **JE** C78, D83. **KW** Bargaining. Non-Walrasian Markets. Pairwise Meetings. Search. Walrasian Equilibrium.

AB We study a market for a single indivisible good, where buyers and sellers who are privately informed regarding their valuation for the good are matched at random, bargain, and in the event of agreement, trade and exit the market. We analyze both the one time entry and the steady state versions of the model as market frictions are asymptotically removed, when the informational asymmetry is one sided and two sided. The equilibria of the different versions of the model are compared to the equilibrium of the corresponding Walrasian version of the model. It is established that for the particular pairwise meetings trading process we study, one sided information is necessary and sufficient for an asymptotically Walrasian and efficient outcome.

PD August 1995. **TI** Decentralized Information and the Walrasian Outcome: A Pairwise Meetings Market with Private Values. **AU** Serrano, Roberto; Yosha, Oved. **AA** Serrano: Brown University. Yosha: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 26/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 26. **PR** no charge. **JE** C78, D82, D83. **KW** Asymmetric Information. Bargaining. Pairwise Meetings. Search. Walrasian Equilibrium. **AB** See Roberto Serrano and Oved Yosha, "Decentralized Information and the Walrasian Outcome: A Pairwise Meetings Market with Private Values", Brown University Department of Economics Working Paper 95/24. July 1995.

PD August 1995. **TI** Axiomatizations of Neoclassical Concepts for Economies. **AU** Serrano, Roberto; Volij, Oscar. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/23; Department of Economics, Brown University, Providence, RI 02912. **PG** 28. **PR** no charge. **JE** C71, D51. **KW** Consistency. Reduced Economy. Core. Walrasian Equilibrium.
AB We characterize the Pareto correspondence, the core and the Walras solution using the axioms of consistency, converse consistency and one- person rationality. Consistency and its converse are defined with respect to suitably constructed reduced economies for each case.

Settle, Russell F.

TI The Effect of Banking Structure on State-Level Economic Growth. **AU** Abrams, Burton A.; Settle, Russell F.

Shaffer, Sherrill

PD January 1995. **TI** Structural Screens in Stochastic Markets. **AA** Shaffer: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/2; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 29. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** D81, L51, L41. **KW** Antitrust. Uncertainty. Demand.
AB Traditional theory may suggest that stochastic effects could undermine the validity of a structure-based antitrust policy, but this issue has not been formally addressed. We do so here, finding that either stochastic costs or stochastic demand can indeed undermine the validity of such a policy in variety of cases, but can reinforce it in others. The overall effect depends on the composition of typical shocks as well as on parameter values.

PD May 1995. **TI** Translog Bias Under Declining Average Costs. **AA** Shaffer: Federal Reserve Bank Of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/13; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 42. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** C21, C51. **KW** Logarithms. Translog Bias. Average Cost.
AB The translog form, fitted to data exhibiting monotonically decreasing average costs, will generally imply spurious U-shaped average costs. The reason is that the log-log transform of any cost function with monotonically declining average costs is strictly convex in log (size) except in limited cases. Moreover, simulations suggest that the severity of the bias is exacerbated by a realistically skewed sample distribution. Similar properties of alternative forms are also considered.

PD October 1995. **TI** The Discount Window and Credit Availability. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/23; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 25. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G21, E51, E43, E12. **KW** Discount Rate. Banking. Deposit Supply.
AB This paper models the impact of the discount window on decisions of individual banks facing stochastic deposit supply. Among other results, we show that the discount window can enhance credit availability (especially under risk-based capital requirements), eliminate certain financial inefficiencies, induce banks to hold additional equity capital, and influence the multiplier. A discontinuous interaction emerges between regulatory capital requirements and use of the discount window, with a more stringent capital requirement inducing some banks to hold less capital.

Sheets, Nathan

PD July 1995. **TI** Capital Flight from the Countries in Transition: Some Theory and Empirical Evidence. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 514; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 46. **PR** no charge. **JE** F32, O57, P27. **KW** Capital Flight. Portfolio Diversification. Property Rights. Transition Economies. Economic Reform.
AB The first portion of this paper develops a simple framework that decomposes home demand for a domestic risky asset into a portfolio diversification incentive, a relative risk incentive, and a relative return incentive. It shows that capital flight may be caused by factors that increase the relative riskiness of the home asset or by structural distortions (such as financial sector inefficiency), which reduce the relative return of the domestic asset. The second portion of the paper provides empirical estimates of capital flight from Poland, Hungary, Czechoslovakia, and Russia for the 1988-93. The analysis concludes that the implementation of "shock therapy" reform programs has been accompanied by substantial capital flight. This has apparently occurred because such reform programs have initially generated increased economic and political uncertainty: prices have jumped toward world levels, property rights have been redistributed, and new institutions have been established. As these reform programs have progressed, however, the quantity of capital flight has declined. Hungary's experience is significantly different from that of the other three countries. Hungary pursued gradual reform and never experienced significant capital flight.

TI Central Bank Independence, Inflation and Growth in Transition Economies. **AU** Loungani, Prakash; Sheets, Nathan.

Shimomura, Ken-Ichi

PD February 1995. **TI** Reversibility Does Not Convert the Equilibrium Existence Theorem. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/10; Department of Economics, Brown University, Providence, RI 02912. **PG** 12. **PR** no charge. **JE** D51. **KW** Irreversibility. Competitive Equilibrium.

AB Irreversibility has been considered as a fundamental assumption of total production set as well as closedness, convexity, and the no free- lunch condition. Assuming only the last three conditions on the production side, we prove existence of competitive equilibrium. This means that irreversibility can be dropped to establish the theorem.

PD February 1995. **TI** The Bargaining Set and Coalition Formation. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/11; Department of Economics, Brown University, Providence, RI 02912. **PG** 26. **PR** no charge. **JE** C71, D71. **KW** Coalitions. Bargaining Set. Mas-Colell.

AB We consider what coalitions are formed by rational agents, and within the coalitions what payoffs are assigned to the members. To answer these questions, we use some versions of the Bargaining Set as solution concepts. We show the nonemptiness of a modification of the Mas-Colell Bargaining Set for at least one coalition structure in nontransferable utility games essentially under no assumptions. We also prove the nonemptiness and efficiency of a refinement of the Zhou Bargaining Set for at least one coalition structure under the "no-crossing condition." Without this condition, we may have inefficiency of the Mas-Colell Bargaining Set, and emptiness of the Zhou Bargaining Set.

Shin, Hyun Song

TI Informational Events That Trigger Currency Attacks. **AU** Morris, Stephen; Shin, Hyun Song.

Shin, Richard T.

PD July 1995. **TI** Competition versus Regulatory Incentives in Disciplining Productive Efficiency. **AU** Shin, Richard T.; Ying, John S. **AA** Shin: Federal Trade Commission. Ying: University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/08; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 21. **PR** not available. **JE** L96, L51. **KW** Telecommunications. Regulation. Monopoly.

AB Since the divestiture of AT&T in 1984, telecommunications regulation has changed dramatically, as regulators seek better alternatives to traditional rate-of-return regulation (ROR). A main goal or hope is that incentive-based plans such as price-cap regulation will eliminate inefficiencies associated with ROR. In this paper, in addition to examining the effect of changes in regulatory regimes on efficiency, we also consider the role of direct competition in disciplining local exchange carriers. Our simulation results suggest that competition has lowered costs while price caps have increased costs, but neither effect has been large thus far.

Shleifer, Andrei

TI Privatization in the United States. **AU** Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W.

TI How Does Privatization Work? Evidence from the Russian Shops. **AU** Barberis, Nicholas; Boycko, Maxim; Shleifer, Andrei; Tsukanova, Natalia.

PD July 1995. **TI** The Limits of Arbitrage. **AU** Shleifer, Andrei; Vishny, Robert W. **AA** Shleifer: Harvard University and National Bureau of Economic Research. Vishny: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5167; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $5.00. **JE** G12, G14. **KW** Arbitrage. Security Pricing. Financial Markets.

AB In traditional models, arbitrage in a given security is performed by a large number of diversified investors taking small positions against its mispricing. In reality, however, arbitrage is conducted by a relatively small number of highly specialized investors who take large positions using other people's money. Such professional arbitrage has a number of interesting implications for security pricing, including the possibility that arbitrage becomes ineffective in extreme circumstances, when prices diverge far from fundamental values. The model also suggests where anomalies in financial markets are likely to appear, and why arbitrage fails to eliminate them.

Shy, Oz

TI Product Differentiation in the Presence of Snob and Bandwagon Effects. **AU** Navon, Ami; Shy, Oz; Thisse, Jacques-Francois.

TI Undercut-Proof Equilibria. **AU** Morgan, Peter B.; Shy, Oz.

Sill, Keith

PD September 1995. **TI** Some Empirical Evidence on Money Demand From a Cash-in-Advance Model. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/20; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 22. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** E41, C62, E13. **KW** Cash-in-Advance. Generalized Method. Moments. Money.

AB Forward-looking models of money demand with rational agents imply certain restrictions on the comovements over time of money balances, consumption, prices and interest rates. These restrictions are examined by estimating a modified version of the Lucas and Stokey (1987) cash/credit model. Generalized method of moments is applied to the model's first order conditions under the assumption that Euler equations do not hold exactly. The stochastic model is solved and the response of the consumption velocity of M1 to shocks to M1 growth and consumption growth are calculated.

Simon, David P.

TI Excess Returns and Risk at the Long End of the Treasury Market: An EGARCH-M Approach. **AU** Brunner, Allan D.; Simon, David P.

Simonson, Itamar

TI The Effect of New Product Features on Brand Choice. **AU** Nowlis, Stephen M.; Simonson, Itamar.

TI The Effect Of Choice Set Composition On Consumer Response To Sales Promotions. AU Nowlis, Stephen M.; Simonson, Itamar.

PD July 1995. TI Context Effects in Managerial Decision Making by Groups and Individuals. AU Simonson, Itamar; Glazer, Rashi. AA Simonson: Stanford University. Glazer: University of California, Berkeley. SR Stanford Graduate School of Business Research Paper: 1338, Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. PG 20. PR no charge. JE D11, D12, M14. KW Management. Compromise. Choice Set.
AB Recent research has demonstrated that, contrary to the assumption of value maximization, consumer choices are influenced by the configuration of the set of options under consideration ("context effects"). We examine whether two types of context effects, asymmetric dominance and compromise, also impact managerial choices, made by individual managers or by groups, among alternative marketing strategies. As predicted, the addition of an asymmetrically dominated option increased the share of the dominating strategy when choices were made by individuals, but the effect was less consistent when decisions were made by groups. We also show that, when making strategic choices, both individuals and groups have a tendency to avoid options that appear as compromises in the considered set. A second study demonstrated that option with intermediate values in the considered choice set, which appear as compromises, are perceived as less likely to provide a competitive advantage and as less effective. The theoretical and practical implications of the results are discussed.

Sindelar, Jody L.

TI Employment, Unemployment, and Problem Drinking. AU Mullahy, John; Sindelar, Jody L.

Sioli, Lucy

TI Vertically Related Markets and Trade Policy in a Bargaining Framework. AU Karp, Larry S.; Sioli, Lucy.

Smets, Frank

TI Contagious Speculative Attacks. AU Gerlach, Stefan; Smets, Frank.

Smith, Stephen

TI Tax and Benefit Reform in the Czech and Slovak Republics. AU Heady, Christopher; Smith, Stephen.

Snower, Dennis J.

PD November 1994. TI The Simple Economics of Benefit Transfers. AA Birkbeck College. SR Centre for Economic Policy Research, Discussion Paper: 1086; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 40. PR 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. JE J23, J24, J32, J64, J65. KW Unemployment. Employment Vouchers. Unemployment Benefits. Employment Creation.
AB The paper examines the employment and unemployment implications of permitting unemployed people to use part of their unemployment benefits to provide employment vouchers to the firms that hire them. This opportunity to transfer unemployment benefits, "benefit transfers", would help replace the unemployment trap by providing an incentive to seek and provide jobs. The vouchers rise with people's unemployment durations and with the amount of training provided to them by the hiring firm. The policy would be costless to the government since the cost of the employment vouchers is set equal to the amount saved on unemployment benefits. It would not be inflationary since the long-term unemployed, on whom the vouchers are targeted, have little influence on wage setting.

PD December 1994. TI Evaluating Unemployment Policies: What do the Underlying Theories Tell Us? AA Birkbeck College. SR Centre for Economic Policy Research, Discussion Paper: 1081; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 49. PR 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. JE E32, J21, J32, J41, J51, J64. KW Unemployment Policies. Laissez Faire. Demand Management. Supply-Side Policies. Structural Policies.
AB The paper surveys unemployment policies for advanced market economies and evaluates them by examining the predictions of the underlying macroeconomic theories. The basic idea is that, for the most part, different unemployment policy prescriptions rest on different macroeconomic theories, and our confidence in the prescriptions should depend -- at least in part -- on the ability of these theories to predict some salient stylized facts about unemployment behavior. The paper considers four types of policies: laissez-faire, demand-management, supply-side, and structural.

Soderlind, Paul

PD January 1995. TI Applied Cointegration Analysis in the Mirror of Macroeconomic Theory. AU Soderlind, Paul; Vredin, Anders. AA Stockholm University. SR Centre for Economic Policy Research, Discussion Paper: 1120; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 24. PR 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. JE C32, E32. KW Cointegration. Money Demand. Stochastic Growth.
AB Applied cointegration analysis has much to gain from strong links with economic theory. For example, the current generation of equilibrium macroeconomic models have simple predictions for cointegrating vectors. These models also suggest that important information about the economic structure can be found in the short-run dynamics, which most cointegration studies disregard. Simulations of a stochastic business cycle model show that tests of cointegrating vectors, forecast, and variance decomposition based on long-run assumptions can be sharpened by imposing even very simple economic restrictions.

Sorensen, Bent E.

TI Channels of Interstate Risksharing: US 1963-1990. AU Asdrubali, Pierfederico; Sorensen, Bent E.; Yosha, Oved.

TI Channels of Interstate Risksharing: US 1963-1990. AU Asdrubali, Pierfederico; Sorensen, Bent E.; Yosha, Oved.

TI Worker Flows and Job Flows in Danish Manufacturing, 1980-91. AU Albaek, Karsten; Sorensen, Bent E.

PD July 1996. TI Income and Consumption Smoothing Among U.S. States: Regions Clubs? AU Sorensen, Bent E.; Yosha, Oved. AA Sorensen: Brown University. Yosha: Tel

Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 19/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 19. **PR** no charge. **JE** D52, E21, E32, E44, F36. **KW** Risk Sharing. Welfare Gains. Capital Markets. States. Federal Government.

AB We quantify the amount of cross-sectional income and consumption smoothing achieved within subgroups of states, such as regions or clubs, e.g., the club of rich states. We find that there is as much income smoothing between as within regions. By contrast, consumption smoothing occurs mainly within regions, but not between regions. This suggests that capital markets transcend regional barriers while credit markets are regional in their nature. Smoothing within the club of rich states is accomplished mainly via capital markets whereas consumption smoothing is dominant within via capital markets whereas consumption smoothing is dominant within the club of poor states. The fraction of a shock of gross state product smoothed by the federal tax-transfer system is the same for various regions and other clubs of states. We calculate the scope for consumption smoothing within various regions and clubs, finding that most gains from risk sharing can be achieved within US regions. Since a considerable fraction of shocks to gross state product are smoothed within regions, we conclude that existing markets achieve a substantial fraction of the potential welfare gains from interstate income and consumption smoothing. Nonetheless, non-negligible welfare gains may be obtained from further improvement of risk sharing institutions.

Souleles, Nicholas

TI Testing for Liquidity Constraints in Euler Equations with Complementary Data Sources. **AU** Jappelli, Tullio; Pischke, Jorn-Steffen; Souleles, Nicholas.

Spagat, Michael

TI Growth Under Uncertainty With Experimentation. **AU** Bertocchi, Graziella; Spagat, Michael.

Spiegel, Yossef

TI Managerial Compensation and Capital Structure. **AU** Berkovitch, Elazar; Israel, Ronen; Spiegel, Yossef.

Srinivasan, V.

PD September 1995. **TI** Surprising Robustness of the Self-Explicated Approach to Customer Preference Structure Measurement. **AU** Srinivasan, V.; Park, Chan Su. **AA** Srinivasan: Stanford University. Park: Hankuk University. **SR** Stanford Graduate School of Business Research Paper: 1342; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 17. **PR** no charge. **JE** D11, C91. **KW** Experiments. Surveys. Utility. Preferences.

AB Customized Conjoint Analysis combines self-explicated preference structure measurement with traditional full-profile conjoint analysis. The more important attributes for each respondent are first identified by the self-explicated approach. Full-profile conjoint analysis customized to the respondent's more important attributes is then administered. The conjoint utility function on the limited set of attributes is then combined with the self-explicated utility function on the full set of attributes. Surprisingly, the self approach by itself yielded a slightly higher predictive validity than the combined approach.

Staiger, Robert W.

TI Protection and the Business Cycle. **AU** Bagwell, Kyle; Staiger, Robert W.

Stark, Thomas C.

TI The Long-Run Variance of Output and Inflation Under Alternative Monetary Policy Rules. **AU** DeFina, Robert H.; Stark, Thomas C.; Taylor, Herbert E.

Stefanou, Spiro

TI Prospects and Policy for Central and East European Agriculture. **AU** Karp, Larry S.; Stefanou, Spiro.

Stein, Jerome L.

PD February 1995. **TI** The Fundamental Determinants of the Real Exchange Rate of the US Dollar Relative to the G7. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/8; Department of Economics, Brown University, Providence, RI 02912. **PG** 38. **PR** no charge. **JE** F31, F47. **KW** Exchange Rates. US Dollar. Current Account. Foreign Debt.

AB This paper provides a consistent theoretical framework to explain the fundamental determinants of the evolution in the medium to longer run of the real effective exchange rate of the US relative to the rest of the G7. The fundamental determinants are productivity and thrift in the US and the G7. The real rate generated by these fundamentals is referred to as the natural real exchange rate (NATREX). Then, using cointegrating and error correction analysis, I examine the explanatory power of the NATREX model to explain the evolution of the real exchange rate of the US dollar during the floating exchange rate period.

PD May 1995. **TI** The Equilibrium Real Exchange Rate of Germany. **AU** Stein, Jerome L.; Sauernheimer, Karlhans. **AA** Stein: Brown University. Sauernheimer: Johannes Gutenberg Universitat, Mainz. **SR** Brown University, Department of Economics Working Paper: 95/16; Department of Economics, Brown University, Providence, RI 02912. **PG** 37. **PR** no charge. **JE** F11, F21, F31, F32. **KW** Germany. Exchange Rates. Capital Movements.

AB The natural real exchange rate (NATREX) model defines the fundamental determinants of the equilibrium real effective exchange rate in the medium to longer run. The purchasing power parity theory is a special case of the NATREX when a linear combination of the fundamentals, which are productivity and social thrift, is stationary. The differences in social thrift under Schmidt and Kohl and the effects of the European terms of trade upon the q-ratio, explain the variations in the NATREX, in the preunification period. The actual real exchange rate of the German mark converged to the NATREX. In the postunification period, the medium run NATREX increased due to the rise in time preference and the cyclically adjusted q-ratio. The actual real exchange rate appreciated accordingly. However, the rise in time preference has lowered the longer run value of the NATREX.

TI Microanalytics of Price Volatility. **AU** Malliaris, A.G.; Stein, Jerome L.

PD October 1995. **TI** Real Exchange Rates and Current Accounts: The Implications of Economic Science for Policy Decisions. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/33; Department

of Economics, Brown University, Providence, RI 02912. **PG** 40. **PR** no charge. **JE** F21, F31, F32. **KW** Exchange Rates. Current Accounts. Policy.
AB First, we pose the basic policy questions that a theory of international finance should be able to answer. Second, we show the inability of the current theories, especially the representative agent- intertemporal optimization model, to answer them. Third, we show how the NATREX model can explain the evolution of the real value of the US dollar and the real value of the German mark from 1973-93.

PD February 1996. **TI** The Natural Real Exchange Rate: Theory and Application to the Real Exchange Rate of the US Dollar Relative to the G7 and to the Real Effective Exchange Rate of Germany. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 96/4; Department of Economics, Brown University, Providence, RI 02912. **PG** 87. **PR** no charge. **JE** F14, F31, F32. **KW** Exchange Rates. US Dollar. Current Account. Foreign Debt. Germany.
AB This essay develops a consistent theoretical framework to explain the fundamental determinants of the evolution in the medium to longer run of the real exchange rate and current account. It is applied to explain the real exchange rate of the United States relative to the currencies of the other G-7 currencies, and to the real effective exchange rate of Germany. The fundamental determinants are productivity and thrift in the United States and the other major industrial countries. For Germany, a relatively small open economy, the external price of imported materials is another fundamental. The real rate generated by these fundamentals is referred to as the natural real exchange rate (NATREX). Then, using cointegrating and error correction analysis, I examine the explanatory power of the NATREX model to explain the evolution of the real exchange rate of the U.S. dollar and Deutsche mark during the floating exchange rate period.

Stern, Scott

TI Market Segmentation and the Sources of Rents from Innovation: Personal Computers in the Late 1980s. **AU** Bresnahan, Timothy, F.; Stern, Scott; Trajtenberg, Manuel.

Stevens, David

TI Job Flows, Worker Flows and Churning. **AU** Burgess, Simon; Lane, Julia; Stevens, David.

Stevens, Guy V. G.

PD October 1995. **TI** On the Inverse of the Covariance Matrix in Portfolio Analysis. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 528; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 13. **PR** no charge. **JE** G11. **KW** Portfolio Analysis. Covariance Matrix.
AB The goal of this study is the derivation and application of a direct characterization of the inverse of the covariance matrix central to portfolio analysis. As argued below, such a specification of the inverse, in terms of a few primitive constructs, helps clarify the determinants of such key concepts as (1) the optimal holding of a given risky asset, (2) the slope of the risk-return efficiency locus faced by the individual investor, and (3) the pricing of risky assets in the Capital Asset Pricing Model. The two building blocks of the inverse turn out to be the non-diversifiable part of each asset's variance and the multiple regression and correlation coefficients obtained by regressing each asset's excess expected return on the set of excess expected returns of all other assets.

Stevens, Margaret

PD December 1994. **TI** The Sharing Hypothesis for Specific Human Capital. **AA** Trinity College, Oxford. **SR** Centre for Economic Policy Research, Discussion Paper: 1124; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 16. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** J31, J41. **KW** Human Capital. Sharing. Tenure. Contracts.
AB This paper examines the foundations of the prediction that the costs of, and returns to , an investment in specific human capital will be shared between worker and firm, and hence that in the presence of specific human capital there will be a positive relationship between wage and tenure. It is shown that the standard model does not in fact predict such a relationship. A more precise definition of sharing is suggested, and two models are described in which sharing does arise in response to a problem of asymmetric information.

Stiglitz, Joseph

TI Financial Restraint: Towards a New Paradigm. **AU** Hellmann, Thomas; Murdock, Kevin; Stiglitz, Joseph.

TI Deposit Mobilization through Financial Restraint. **AU** Hellmann, Thomas; Murdock, Kevin; Stiglitz, Joseph.

TI A Unifying Theory of Credit and Equity Rationing in Markets with Adverse Selection. **AU** Hellmann, Thomas; Stiglitz, Joseph.

Stull, William J.

PD September 1995. **TI** Is High School Economically Relevant for Noncollege Youth? **AA** Temple University and Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/18; 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** I21, J13, J24. **KW** Education. High School. Rational Apathy. Training.
AB This paper develops and tests the Rational Apathy model (RAP), which divides high school students into three groups. The first, and smallest, group consists of students aspiring to attend competitive institutions of higher learning. The second is made up of students who plan to attend noncompetitive colleges and universities. The last, and largest, group consists of students who do not intend to pursue any form of higher education. The main conclusion of the RAP model is that the current reward system in high schools guarantees widespread apathy because for most students, there is no immediate benefit to be gained from taking high school seriously. The paper tests this model using data from the High School and Beyond panel study. It concludes that neither skills nor credentials acquired in high school have an important influence on the wages that noncollege youth earn a few years after leaving high school. High school is not relevant to the early economic success of these students. Their apathy in the face of its academic and

nonacademic imperatives is thus best understood as a rational response to an education system which, for them, is disconnected from the world of work.

Stulz, Rene M.

TI Leverage, Investment, and Firm Growth. **AU** Lang, Larry; Ofek, Eli; Stulz, Rene M.

TI Why is there a Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan. **AU** Kang, Jun-Koo; Stulz, Rene M.

Stutzer, Michael

TI The Simple Analytics of Observed Discrimination in Credit Markets. **AU** Calem, Paul S.; Stutzer, Michael.

Subramanian, Hariharan

TI Capital Market Integration and Convergence in International Lending Rates. **AU** Beck, Stacie E.; Subramanian, Hariharan.

Subramanian, Shankar

TI The Role of Defense Cuts in the California Recession: Computable General Equilibrium Models and Interstate Factor Mobility. **AU** Hoffmann, Sandra; Robinson, Sherman; Subramanian, Shankar.

Sulganik, Eyal

PD January 1996. **TI** The Value of Information: The Case of Signal-Dependent Opportunity Sets. **AU** Sulganik, Eyal; Zilcha, Itzhak. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 1/96; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 13. **PR** no charge. **JE** D82, D83. **KW** Information. Signal-Dependent.

AB We generalize the economic decision problem considered by Blackwell (1953) in which a decision maker chooses an action after observing a signal correlated to the state of nature. Unlike Blackwell's case where the feasible set is fixed, in our framework, the feasible set of actions depends on the signal and the information system. As we indicate such a framework has more significance to economic models. We show that in this case, contrary to Blackwell's well-known result, more information may be disadvantageous. We derive conditions for this general model which guarantee that more information is beneficial.

Sussman, Oren

PD February 1995. **TI** Banking and Development. **AU** Sussman, Oren; Zeira, Joseph. **AA** Hebrew University of Jerusalem. **SR** Centre for Economic Policy Research, Discussion Paper: 1127; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 37. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E44, G21, O16. **KW** Financial Development. Banks. Economic Growth.

AB This paper reformulates the well known financial development conjecture (FDC) and supplies some new empirical evidence in its favor. The financial development conjecture, namely, that there exist strong feedback effects between real and financial development, is described in this paper by use of the cost of financial intermediation. The theoretical part of the paper describes how specialization of banks can lead to such feedback effects, which work through the cost of financial intermediation. In the empirical part of the paper we use US cross-state data from bank's income statements to show that the cost of banking is negatively related to the level of real economic development.

Svensson, Lars E. O.

PD October 1994. **TI** Estimating and Interpreting Forward Interest Rates: Sweden 1992-1994. **AA** Stockholm University. **SR** Centre for Economic Policy Research, Discussion Paper: 1051; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 26. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E52, F31, G12. **KW** Monetary Policy Indicators. Term Structure. Interest Rates. Inflation Expectations. Credibility.

AB The use of forward interest rates as a monetary policy indicator is demonstrated, using Sweden between 1992 and 1994 as an example. The forward rates are interpreted as indicating market expectations of the time path of future interest rates, future inflation rates, and future currency depreciation rates. They separate market expectations for the short, medium and long term more easily than the standard yield curve. Forward rates are estimated with an extended and more flexible version of Nelson and Siegel's functional form.

Svensson, Lars E.O

PD January 1995. **TI** The Swedish Experience of an Inflation Target. **AA** Stockholm University. **SR** Centre for Economic Policy Research, Discussion Paper: 1103; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 21. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E32, F33, F41. **KW** Monetary Policy. Floating Exchange Rates.

AB The paper gives a brief account of the Swedish experience of an inflation target in a floating exchange rate regime; identifies, documents and discusses the current problems in Swedish monetary policy and their origins; suggests what can be done to remedy the problems; and draws some general conclusions. The two main current problems are the lack of credibility of the target and the significant risk that the target will be missed. The reasons for the lack of credibility include the fiscal situation, the institutional set-up of monetary policy, the political division about monetary policy, and the insufficient transparency of and commitment to the current inflation-targeting policy.

Swagel, Phillip

PD April 1995. **TI** Import Prices and the Competing Goods Effect. **AA** Northwestern University. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 508; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 30. **PR** no charge. **JE** F12, F31. **KW** Import Competition. Exchange Rates. Pass-Through. Inflation.

AB I use disaggregated U.S. data from 1978 to 1988 to examine the impact of changes in the prices of imported manufactured goods on corresponding domestic prices -- the "competing goods effect." I use an econometric specification which allows for product differentiation between domestic and imported goods, and provides measures of exchange rate pass-through and economies of scale. I find that the impact of import prices on domestic prices varies substantially by industry, with statistically significant effects in nine of nineteen two-digit SIC manufacturing categories. However, even where the effects are statistically significant, they are typically small in economic terms. On the whole, I do not find support for the anecdotal evidence that firms in US manufacturing industries take advantage of the reduced competitive discipline of higher import prices. Because import prices are not a substantial determinant of domestic prices in the U.S., this implies that the consequent danger of imported inflation is small.

TI Supply-Side Sources of Inflation: Evidence from OECD Countries. **AU** Loungani, Prakash; Swagel, Phillip.

Tabellini, Guido

TI Double-Edged Incentives: Institutions and Policy Coordination. **AU** Persson, Torsten; Tabellini, Guido.

TI Federal Fiscal Constitutions. Part II: Risk Sharing and Redistribution. **AU** Persson, Torsten; Tabellini, Guido.

TI Endogenous Distortions in Product and Labour Markets. **AU** Rama, Martin; Tabellini, Guido.

Tahvonen, Olli

TI International Trade in Exhaustible Resources: A Cartel-Competitive Fringe Model. **AU** Karp, Larry S.; Tahvonen, Olli.

Taylor, Herbert E.

TI The Long-Run Variance of Output and Inflation Under Alternative Monetary Policy Rules. **AU** DeFina, Robert H.; Stark, Thomas C.; Taylor, Herbert E.

Temzelides, Theodosios

TI Beliefs, Competition, and Bank Runs. **AU** Adao, Bernardino; Temzelides, Theodosios.

Tesar, Linda L.

TI Supply-Side Economics in a Global Economy. **AU** Mendoza, Enrique G.; Tesar, Linda L.

Thisse, Jacques-Francois

TI On the Persistence of Leadership or Leapfrogging in International Trade. **AU** Motta, Massimo; Thisse, Jacques-Francois; Cabrales, Antonio.

TI Privatization and Efficiency in a Differentiated Industry. **AU** Anderson, Simon P.; De Palma, Andre; Thisse, Jacques-Francois.

TI Product Differentiation in the Presence of Snob and Bandwagon Effects. **AU** Navon, Ami; Shy, Oz; Thisse, Jacques-Francois.

Thomas, Charles P.

TI Using Options Prices to Infer PDFs for Asset Prices: An Application to Oil Prices During the Gulf Crisis. **AU** Melick, William R.; Thomas, Charles P.

Thornton, James R.

PD March 1995. **TI** An Optimal Stock Option Plan For CEO Compensation Packages. **AA** University of Delaware. **SR** University of Delaware, Department of Economics, Working Paper: 95/02; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 21. **PR** not available. **JE** J33, G13. **KW** Compensation. Ownership. Stock Options.

AB The compensation packages of the chief executive officers (CEOs) of the largest U.S. firms have been criticized as being too large and insufficiently sensitive to their firm's performance. Using a moral hazard principal-agent model that includes limited liability and a risk- neutral agent, the analysis shows that stock option grants can be used to make CEOs' compensation optimally sensitive to the firm's performance and thereby reduce such agency costs as ill-advised acquisitions, subsidization of poorly performing units, or executive perquisites. Since CEOs can let out-of-the-money stock options expire costlessly, stock option grants limit the liability of CEOs. In the plan, options can only be exercised if the price of the firm's stock reaches a specified target. This optimal target may exceed the exercise price of the option. The critics who have argued that the terms of the typical stock option grant have been too generous may be correct.

Toniolo, Gianni

TI Post-War Growth: An Overview. **AU** Crafts, Nicholas F. R.; Toniolo, Gianni.

Tornell, Aaron

TI The Collapse of the Mexican Peso: What Have We Learned? **AU** Sachs, Jeffrey; Tornell, Aaron; Velasco, Andres.

Trajtenberg, Manuel

TI A Time to Sow and a Time to Reap: Growth Based on General Purpose Technologies. **AU** Helpman, Elhanan; Trajtenberg, Manuel.

TI Quality-Adjusted Prices for the American Automobile Industry: 1906- 1940. **AU** Raff, Daniel M.G.; Trajtenberg, Manuel.

TI Universities as a Source of Commercial Technology: A Detailed Analysis of University Patenting 1965-1988. **AU** Henderson, Rebecca; Jaffe, Adam B.; Trajtenberg, Manuel.

TI Market Segmentation and the Sources of Rents from Innovation: Personal Computers in the Late 1980s. **AU** Bresnahan, Timothy, F.; Stern, Scott; Trajtenberg, Manuel.

Trejos, Alberto

PD May 1995. **TI** Toward a Theory of International Currency: A Step Further. **AU** Trejos, Alberto; Wright, Randall. **AA** Trejos: Northwestern University. Wright: University of Pennsylvania and Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/14; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 56. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** F31, F33, E52. **KW** Foreign Exchange. Central Banks.

AB We generalize the two-country, two-currency model of

Matsuyama, Kiyotaki, and Matsui to resolve two "shortcomings" in their approach. First, we endogenize nominal prices and real exchange rates. Second, we endogenize monetary policy. We then use the model to address the following new questions: How does the fact that currency circulates internationally affect its purchasing power? Where does an international currency purchase more? What are the effects on seignorage and welfare when a currency becomes international? How is policy affected by concerns of currency substitution? How are national monetary policies connected, and what is the scope for international cooperation?.

Truman, Edwin M.

PD January 1996. **TI** The Risks and Implications of External Financial Shocks: Lessons from Mexico. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 535; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 32. **PR** no charge. **JE** F31, F32. F33, O54. **KW** International Capital. Exchange Rates. Mexico.

AB The lessons from the 1994-95 Mexican peso crisis are examined from the perspective of creditors and their markets, countries that are recipients of large capital inflows, and the functioning of the international system as a whole. From each of these perspectives, recent changes in the financial world are sketched, lessons from the Mexican experience are derived, and implications for policies are considered.

Tryon, Ralph

TI Block Distributed Methods for Solving Multi-Country Econometric Models. **AU** Faust, Jon; Tryon, Ralph.

Tsiddon, Daniel

TI Inflation, Nominal Interest Rates and the Variability of Output. **AU** Chadha, Bankim; Tsiddon, Daniel.

TI Technological Progress, Mobility, and Economic Growth. **AU** Galor, Oded; Tsiddon, Daniel.

TI Technological Progress, Mobility and Economic Growth. **AU** Galor, Oded; Tsiddon, Daniel.

Tsukanova,

TI How Does Privatization Work? Evidence from the Russian Shops. **AU** Barberis, Nicholas; Boycko, Maxim; Shleifer, Andrei; Tsukanova, Natalia.

Tversky, Amos

TI Naive Strategies in Competitive Games. **AU** Rubinstein, Ariel; Tversky, Amos; Heller, Dana.

Tyler, John

PD May 1995. **TI** Are Lots of College Graduates taking High School Jobs? A reconsideration of the Evidence. **AU** Tyler, John; Murnane, Richard J.; Levy, Frank. **AA** Tyler: Harvard University. Murnane: Harvard University and National Bureau of Economic Research. Levy: Massachusetts Institute of Technology. **SR** National Bureau of Economic Research, Working Paper: 5127; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 17. **PR** $5.00. **JE** I21, J21, J31, J40. **KW** Labor Skills. Labor Market. High School Jobs. College Degrees.

AB Several recent published papers have asserted that a growing proportion of workers with college degrees are either unemployed or employed in jobs requiring only high school skills. Using data from the 1980 and 1990 Censuses of Population and Housing, we show that this assertion does not accurately reflect labor market trends for young (25- 34 year old) male or female college graduates or for older (45-54 year old) female college graduates. For all these groups, real earnings increased during the 1980s and the percentage in "high school jobs" declined. The assertion is valid only for older male college graduates. Young college graduates improved their labor market position during the 1980s by increasingly obtaining degrees in occupations which had high earnings at the beginning of the decade and which had the highest earnings growth over the decade.

Ubide, Angel J.

TI Household Production and International Business Cycles. **AU** Canova, Fabio; Ubide, Angel J.

Ulph, Alistair

PD November 1994. **TI** Trade, Strategic Innovation and Strategic Environmental Policy: A General Analysis. **AU** Ulph, Alistair; Ulph, David. **AA** Ulph, A.: University of Southampton. Ulph, D.: University College London. **SR** Centre for Economic Policy Research, Discussion Paper: 1063; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 36. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F12, F13, H23, Q28. **KW** Environmental Policy. International Trade. Imperfect Competition. Innovation. Strategic Behavior.

AB There has been much debate recently about the nature of environmental policy that will be set by governments concerned about the competitive advantage their industries might obtain in a world of fierce trade competition. Some claim governments will set environmental policies that are too lax, while others claim that policies will be excessively tough (in order to spur firms to innovate). Both these claims relate to the possibility that governments may distort their environmental policies for strategic reasons, and to test these claims requires modeling environmental policy in a world of imperfect competition where there are strategic gains to governments trying to manipulate markets through their environmental policies, and to producers trying to manipulate markets through their research and development decisions. There is now a considerable literature which adapts the literature on strategic international trade to include environmental policy, but this literature suffers from some limitations. Most of the models consider the cases where either only governments act strategically or only producers act strategically. A proper analysis would allow for both sets of agents to act strategically. This is done in Ulph (1993a), and in Ulph (1994). In this paper we provide a more general treatment of the issues. We allow for both governments and producers to act strategically, and for producers' research and development to reduce both costs of production and emissions, but without imposing special functional forms. We show that despite this extra generality, the papers by Ulph (1993a) and Ulph (1994) effectively encompass the entire set of qualitative results that can be obtained.

PD November 1994. **TI** Strategic Environmental Policy and International Trade: The Role of Market Conduct.

AA University of Southampton. **SR** Centre for Economic Policy Research, Discussion Paper: 1065; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 30. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** F12, F13, H23, Q28. **KW** Environmental Policy. Imperfect Competition. International Trade. Strategic Behavior. Market Conduct.

AB In this paper I analyze the incentives for governments and producers to act strategically in imperfectly competitive markets when there is Bertrand competition. Strategic behavior by governments takes the form of distortions to their environmental policy from the first-best rule of equating marginal damage and marginal abatement costs. Strategic behavior by producers implies inefficient investment in research and development. I contrast the outcomes with Bertrand competition with those in Cournot competition, which I analyzed in an earlier paper (Ulph (1993a)). The main findings are: when only governments act strategically, they will set too tough of an environmental policy and the distortion will be greater if governments use emission standards rather than emission taxes; both results are the opposite of what happened in Cournot competition. When only producers act strategically, they under-invest in research and development (in Cournot they over- invest), but it is not possible to give a universal ranking of policy instruments. When governments and producers act strategically, this reduces the extent of government distortion of environmental policy, which is the same result as with Cournot, but for very different reasons; when governments use emission taxes then with Bertrand competition they set taxes below the first-best level, the reverse of what happens when only governments act strategically.

Ulph, David

TI Trade, Strategic Innovation and Strategic Environmental Policy: A General Analysis. **AU** Ulph, Alistair; Ulph, David.

Uribe, Martin

PD March 1995. **TI** Exchange-Rate Based Inflation Stabilization: The Initial Real Effects of Credible Plans. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 503.; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 28. **PR** no charge. **JE** E31, F41. **KW** Open Economy. Exchange Rates. Inflation Stabilization.

AB This paper presents a dynamic general equilibrium model of a small, open, monetary economy in order to analyze the short-run effects of credible stabilization plans that fix the nominal exchange rate in a regime of free convertibility. In this model inflation acts as a tax on domestic market transactions. In particular, it generates a wedge between the rate of return on investment in domestic capital and the rate of return on investment in foreign assets. The model stresses the importance of adjustment costs (including gestation lags) in explaining the precise character of the initial dynamics. The main stylized facts of this type of program namely an initial phase characterized by several months of real exchange rate appreciation, trade balance deterioration and expansion in aggregate demand and production, followed by a deflationary slowdown in real activity, are replicated without resorting to credibility problems, sticky prices, adaptive expectations, or gradual disinflation schemes. Finally, the model is calibrated using long-run relations from the Argentinean economy, and its quantitative predictions are compared to the initial effects of that country's Convertibility Plan of April 1991.

PD March 1995. **TI** Real Exchange Rate Targeting and Macroeconomic Instability. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 505; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 37. **PR** no charge. **JE** F31, F41. **KW** Exchange Rates. Sunspots. Speculation.

AB This paper introduces a real exchange rate rule of the type analyzed by Dornbusch (1982) in an optimizing, two-sector, monetary model of a small open economy. By this rule the government increases the devaluation rate when the real exchange rate is below its long-run level and reduces it when the real exchange rate is above its long-run level. I show that the mere existence of such a rule can give room for extrinsic uncertainty to have real effects, that is, it can generate economic fluctuations due to self-fulfilling expectations. I also analyze the stabilizing role of these PPP rules when fluctuations are driven by shocks to fundamentals. I show that the volatility of real variables decreases with tighter rules when shocks to the supply of home goods or to the real rate of return are the main source of uncertainty, and increases when fluctuations are mainly due to shocks to the supply of traded goods. In all cases, PPP rules increase the volatility of nominal variables. Finally, PPP rules stabilize both real and nominal variables when fluctuations originate from random but persistent deviations from the PPP rule itself.

PD May 1995. **TI** Hysteresis in a Simple Model of Currency Substitution. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 509; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 24. **PR** no charge. **JE** F41. **KW** Currency Substitution. Hysteresis. Dollarization.

AB A simple model of currency substitution is developed in which the private cost of performing transactions in the foreign currency depends upon the aggregate degree of dollarization. This feature generates multiple steady states and hysteresis in an otherwise standard cash-in- advance model of a small open economy. In particular, a temporary increase in the rate of inflation can drive the economy to a dollarized equilibrium in which the velocity of circulation of domestic currency is permanently higher.

PD February 1996. **TI** Comparing the Welfare Costs and the Initial Dynamics of Alternative Temporary Stabilization Policies. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System, International Finance Discussion Papers: 539; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 33. **PR** no charge. **JE** E63, F41. **KW** Open Economy. Stabilization. Imperfect Credibility. Welfare Costs.

AB This paper compares the welfare costs and initial dynamics of three alternative inflation stabilization polices using the staggered price model with imperfect credibility and currency substitution developed by Calvo and Vegh (1990). In addition to the policies analyzed by Calvo and Vegh (1990) -- a temporary exchange-rate based stabilization program (ERB), and a temporary money based program (MB) -- this paper considers a third stabilization policy consisting of a temporary money based program with initial reliquefication -- i.e., an initial once-and-for- all increase in the money supply -- that keeps the nominal and real exchange rate from appreciating on impact (MBR). Simulations results suggest that the welfare costs associated with ERB and MBR programs are lower than those generated by MB programs. This seems to be the case even for highly temporary programs and for economies with low degree of currency substitution. ERB and MBR programs produce similar welfare costs except in two cases: when the policy change is very temporary, MBR programs do better, while for high values of the elasticity of currency substitution ERB programs outperform MBR programs.

Vayanos, Dimitri

PD March 1996. **TI** Transaction Costs and Asset Prices: A Dynamic Equilibrium Model. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1376; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 30. **PR** no charge. **JE** D23, G12, D51. **KW** Asset Pricing. Transaction Costs.

AB In this paper we study the effects of transaction costs on asset prices in an overlapping generations economy with a riskless and liquid bond and N risky stocks whose trading is subject to proportional costs. Quite surprisingly, the price of stock does not always decrease in its transaction costs. In fact, the effect of transaction costs on the stock price is smaller than the present value of transaction costs incurred at intervals of size equal to the stock's minimum holding period. We also find that a more frequently traded stock is not always more adversely affected by an increase in its transaction costs and that the price of a stock does not always increase when the transaction costs of a more liquid and correlated stock decrease. Our model is very tractable and closed-form solutions can be obtained.

Velasco, Andres

TI The Collapse of the Mexican Peso: What Have We Learned? **AU** Sachs, Jeffrey; Tornell, Aaron; Velasco, Andres.

Viaene, Jean-Marie

PD April 1995. **TI** Multiple Uncertainty, Forward-Futures Markets and International Trade. **AU** Viaene, Jean-Marie; Zilcha, Itzhak. **AA** Viaene: Erasmus University and Tinbergen Institute. Zilcha: Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 11/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 21. **PR** no charge. **JE** D81, D84, G13, F31. **KW** Uncertainty. Risk Aversion. Incomplete Markets. Forward Rate. Futures Rate.

AB The optimum behavior of a competitive risk-averse international trader who supplies or demands commodities invoiced in foreign currency is examined when his profits are subject to several forms of risk: production, domestic cost, the exchange rate and the commodity price. The focus of our study is the robustness of the known results regarding the role of forward-futures markets in the presence of cost and output uncertainty. New results on the implications of the framework for the separation and the double hedging theorems are derived. The behavior of the same firm with and without complete markets is compared and conditions are obtained for a domestic price guarantee or a gradual introduction of missing markets to promote the level of international trade.

Vickers, John

TI Performance Comparisons and Dynamic Incentives. **AU** Meyer, Margaret A.; Vickers, John.

Vishny, Robert W.

TI Privatization in the United States. **AU** Lopez-de-Silanes, Florencio; Shleifer, Andrei; Vishny, Robert W.

TI The Limits of Arbitrage. **AU** Shleifer, Andrei; Vishny, Robert W.

Vogel, Stephen

TI Environmental Distortions and Welfare Consequences in a Social Accounting Framework. **AU** Golan, Elise Hardy; Adelman, Irma; Vogel, Stephen.

Vohra, Rajiv

PD January 1995. **TI** Coalitional Non-Cooperative Approaches to Cooperation. **AA** Brown University. **SR** Brown University, Department of Economics Working Paper: 95/6; Department of Economics, Brown University, Providence, RI 02912. **PG** 15. **PR** no charge. **JE** C71, C72. **KW** Cooperative Games. Non-Cooperative Games. Binding Agreements.

AB The paper explores two aspects of the inter-connections between cooperative and non-cooperative approaches to game theory. First, the author discusses the issue of consistency in coalitional deviations. This is a non-cooperative idea but one that can be applied to cooperative equilibrium concepts in the characteristic function form. Second, the author focuses on the growing literature that studies the process through which equilibrium cooperative agreements are reached. Even in settings in which binding agreements can, in principle, be written (and enforced), the negotiations that lead to a final considerations. In particular, the ability to write binding agreements does not preclude a player from choosing not to cooperate.

Voith, Richard

PD April 1995. **TI** Parking, Transit and Employment in a CBD. **AA** no available. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 95/11; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 35. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** R13, R42, D51, H21. **KW** Business District. General Equilibrium. Parking. Taxation.

AB This paper presents a general equilibrium model to examine the role of parking and transit subsidy policy on central business district size (and hence agglomeration), central business district land values, and the market shares of cars and transit. The three main features of the model are: 1) agglomeration economies increase continuously with labor market size; 2) congestion arises from auto use only; transit is noncongestible; 3) locational equilibrium is maintained in the sense that firms and individuals cannot reduce costs or increase utility by moving, given equilibrium prices and city size. Conditions are derived under which parking taxes can be levied and used to subsidize transit to increase equilibrium central business district size and land values.

Volij, Oscar

TI Feasible Implementation of Taxation Methods. **AU** Dagan, Nir; Serrano, Roberto; Volij, Oscar.

TI Axiomatizations of Neoclassical Concepts for Economies. **AU** Serrano, Roberto; Volij, Oscar.

TI Formation of Nations in a Welfare State Minded World. **AU** Dagan, Nir; Volij, Oscar.

Vrankovich, Elizabeth

TI International Comparisons of the Levels of Unit Labor Costs in Manufacturing. **AU** Hooper, Peter; Vrankovich, Elizabeth.

Vredin, Anders

TI Applied Cointegration Analysis in the Mirror of Macroeconomic Theory. **AU** Soderlind, Paul; Vredin, Anders.

Waidmann, Timothy

TI Race and Education Differences in Disability Status and Labor Force Attachment. **AU** Bound, John; Schoenbaum, Michael; Waidmann, Timothy.

Wang, Jiang

PD July 1995. **TI** The Term Structure of Interest Rates in a Pure Exchange Economy with Heterogeneous Investors. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research, Working Paper: 5172; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** $5.00. **JE** E43. **KW** Interest Rates. Term Structure. Exchange Economy. Equilibrium Model.
AB This paper presents an equilibrium model of the term structure of interest rates when investors have heterogeneous preferences. The basic model considers a pure exchange economy of two classes of investors with different (but constant) relative risk-aversion and gives closed-form solutions to bond prices. We use the model to examine the effect of preference heterogeneity on the behavior of bond yields. Extensions to cases of more than two investors are also considered.

Wang, Ping

TI Real Exchange Rate Movements in High Inflation Countries. **AU** Rogers, John H.; Wang, Ping.

Wasilyew, George

TI Simulations of Failure in a Payment System. **AU** McAndrews, James J.; Wasilyew, George.

Weil, David N.

TI Intergenerational Earnings Mobility, Inequality, and Growth. **AU** Owen, Ann; Weil, David N.

TI Saving and Growth with Habit Formation. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N.

TI Saving and Growth with Habit Formation. **AU** Carroll, Christopher D.; Overland, Jody; Weil, David N.

Weiss, Yoram

PD March 1995. **TI** Growth and Labor Mobility. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 8/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 32. **PR** no charge. **JE** J24, I21, O15. **KW** Knowledge. Transmission. Training. Schooling. Human Capital.
AB Recent literature on economic growth emphasizes the role of human capital as "engine of growth". Most of this literature simply assumes that accumulated productive knowledge spills over and benefits all agents in the economy, without much attention to the process by which different agents learn from each other. This paper analyzes the role of labor mobility in the transmission of existing productive knowledge and in the creation of new productive knowledge. The working of the labor market and the processes of training and schooling are described in sufficient detail to allow analysis of specific labor market policies. Particular attention is given to the possible consequences of restrictions on labor mobility, such as minimum wage legislation, which characterize developing economies. It is shown that such restrictions can impede growth.

TI Social Rewards, Externalities and Stable Preferences. **AU** Fershtman, C.; Weiss, Yoram.

PD November 1995. **TI** Immigration, Search and Loss of Skill. **AU** Weiss, Yoram; Gotlibovski, M. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 34/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 32. **PR** no charge. **JE** J61, J41, J24. **KW** Immigration. Search. Skill Loss. Human Capital.
AB The paper analyzes the first stages of the absorption process of immigrants from the USSR in Israel. A search model is constructed to describe the behavior of immigrants. The duration of time to first full time job, the wage on the first job and the occupation in which the first job is located are estimated. From these estimates we can derive an estimate for the loss of skill by immigrants. Among male immigrants who are 25 or older, the expected loss is 1.9 years of schooling and 9.5 percent of wages. About 38 percent of the loss in schooling and about 53 percent of the loss in wages is due to search for a first job. The remainder is due to compromises that immigrants make in accepting job offers.

TI Uncertain Health and Survival: Effects on End-of-Life Consumption. **AU** Lillard, Lee A.; Weiss, Yoram.

TI Social Rewards, Externalities and Stable Preferences. **AU** Fershman, Chaim; Weiss, Yoram.

Werner, Alejandro M.

TI The Monetary Transmission Mechanism in Mexico. **AU** Copelman, Martina; Werner, Alejandro M.

Werner, Ingrid M.

TI Effects of Geography and Stock-Market Structure: A Comparison of Cross-Listed Securities. **AU** Kleidon, Allan W.; Werner, Ingrid M.

Weymark, John A.

PD June 1996. **TI** An Informationally Parsimonious Impartial Observer Theorem. **AU** Weymark, John A.; Karni, Edi. **AA** Weymark: University of British Columbia. Karni: Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 366; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 11. **PR** no charge. **JE** D71, D81. **KW** Harsanyi. Impartial Observer. Utilitarianism. Uncertainty.

AB In Harsanyi's impartial observer theorem, an impartial observer determines a social ordering of the lotteries on the set of social alternatives based on a sympathetic but impartial concern for all individuals in society. This ordering is derived from a more primitive ordering on the set of all extended lotteries. An extended lottery is a lottery which determines both the observer's personal identity and the social alternative. We establish a version of Harsanyi's theorem in which the observer is only required to have preferences on the extended lotteries in which there is an equal chance of being any person in society.

White, Matthew W.

PD August 1995. **TI** Regulating Bypass. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1350 ; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 32. **PR** no charge. **JE** L21, L13. **KW** Regulation. Mechanism Design. Access Pricing. Exit. Bypass.

AB This paper examines optimal regulatory response to a customer considering bypass: service from an unregulated, fringe supplier. Bypass is costly to a regulator concerned with the allocation of a franchise monopoly's revenues among consumers. I analyze how a regulatory agency should respond to a bypass threat if the regulator is uncertain of the potential bypasser's reservation price. Under mild regularity conditions, I derive an explicit bypass policy as a function of the regulator's assessment of the potential bypasser's willingness-to-pay, and prove the optimality of this policy given the regulators' limited information. In contrast to existing literature, this paper demonstrates that it is not necessarily optimal for a regulator to distort prices from marginal costs to reduce information rents accruing to informed parties. In particular, an optimal bypass policy involves uniform marginal cost prices but third-degree price discrimination through fixed charges reflecting the likelihood of bypass. In addition, I demonstrate that even under an optimal policy there is an inefficiently high likelihood of bypass relative to a full-information environment. This policy is derived in a traditional rate-of-return regulatory context, allowing one to identify some remediable adverse consequences of current regulatory practice. Particular attention is given to the telecommunications and electric power industries.

PD September 1995. **TI** Dynamic Efficiency and the Regulated Firm: Evidence from Interfirm Trade in Electricity Markets. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1352; Jackson Library Graduate School of Business, Stanford University, Stanford, CA 94305-5016. **PG** 37. **PR** no charge. **JE** L94, L51, D43. **KW** Electricity. Regulation. Monopoly.

AB This paper presents an empirical analysis of the value of a coordinated markets exchange mechanism. I present models of efficient trading mechanisms under uncertainty, and develop a measure of the value of an interfirm trade agreement in the context of sequential "buy- versus-produce' decision-making by firms. The theory is applied to estimate the value of a formal trading institution in the California electricity market, where an interutility power pool has been proposed to restructure the electric power industry. I develop an empirical model of the optimal production and trading decisions for a firm in such a pool, and estimate state-contingent willingness-to-trade functions for each of the four major utilities in this market. With this information, I estimate the distribution of future costs that would obtain if an efficient exchange mechanism arbitraged away observed differences between willingness-to-buy and willingness-to-sell among the sample firms. The principal finding is that with the simple, relatively state-independent bilateral contracts observed in this market, the sample firms achieve within 4% of the theoretical minimum expected costs available with a complete state-contingent exchange mechanism. This difference represents an opportunity cost of approximately $250 million per year. I conclude with regulatory and managerial explanations for the absence of a more efficient state-contingent trading mechanism, and implications for deregulating electric power markets.

Whited, Toni M.

TI Two-Step GMM Estimation of the Errors-in-Variables Model Using High- Order Moments. **AU** Erickson, Timothy; Whited, Toni M.

Willis, Jonathan L.

TI Targeting Inflation in the 1990s: Recent Challenges. **AU** Freeman, Richard T.; Willis, Jonathan L.

Willis, Rachel A.

TI Would Reducing Tenure Probabilities Increase Faculty Salaries? **AU** Ehrenberg, Ronald G.; Pieper, Paul J.; Willis, Rachel A.

Wilson, Aaron J.

TI Incidental Consumption in Recreation Demand. **AU** Parsons, George R.; Wilson, Aaron J.

Wilson, G. Peter

TI Factors Influencing Firms' Disclosures About Environmental Liabilities. **AU** Barth, Mary E.; McNichols, Maureen F.; Wilson, G. Peter.

Winkelmann, Liliana

PD January 1995. **TI** Unemployment: Where Does It Hurt? **AU** Winkelmann, Liliana; Winkelmann, Rainer. **AA** Dartmouth College. **SR** Centre for Economic Policy Research, Discussion Paper: 1093; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 19. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** D61, D63, J64, J65, J68. **KW** Satisfaction. Panel Data. Costs of Unemployment.

AB We investigate how individual well-being is affected by unemployment. Analyzing panel data on life satisfaction, we find that unemployment has a large and negative effect. The lack of evidence for a similar effect of nonparticipation casts doubt on the natural rate view of unemployment. Further, we decompose the total well-being costs of unemployment and find that between 85 per cent and 93 per cent are non- pecuniary, and that only 7-15 per cent are pecuniary. The main implication is that the benefits of employment generating policies exceed the benefits of policies that are designed to mitigate the effects of unemployment through income transfers.

Winkelmann, Rainer

TI Unemployment: Where Does It Hurt? **AU** Winkelmann, Liliana; Winkelmann, Rainer.

Woglom, Geoffrey

TI Do Credit Markets Discipline Sovereign Borrowers? Evidence from US States. **AU** Bayoumi, Tamim A.; Goldstein, Morris; Woglom, Geoffrey.

Wright, Brian D.

TI Sovereign Debt As Intertemporal Barter. **AU** Kletzer, Kenneth M.; Wright, Brian D.

Wright, Randall

TI Toward a Theory of International Currency: A Step Further. **AU** Trejos, Alberto; Wright, Randall.

Wyplosz, Charles

TI Speculative Attacks on Pegged Exchange Rates: An Empirical Exploration with Special Reference to the European Monetary System. **AU** Eichengreen, Barry; Rose, Andrew K.; Wyplosz, Charles.

TI Is There a Safe Passage to EMU? Evidence On Capital Controls and a Proposal. **AU** Eichengreen, Barry; Rose, Andrew K.; Wyplosz, Charles.

TI Equilibrium Real Exchange Rates in Transition. **AU** Halpern, Laszlo; Wyplosz, Charles.

Yafeh, Yishay

PD February 1995. **TI** Large Shareholders and Banks: Who Monitors and How. **AU** Yafeh, Yishay; Yosha, Oved. **AA** Yafeh: The Hebrew University of Jerusalem. Yosha: Tel Aviv University and Brown University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 4/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 19. **PR** no charge. **JE** G21, G34, G32, M37. **KW** Advertising. Main Bank. Large Shareholders. Monitoring. Research.

AB We investigate the nature of monitoring by stake holders using data on Japanese manufacturing firms. Shareholders and bank-centered corporate groups monitor firms by reducing activities with scope for managerial moral hazard such as advertising, R&D and entertainment expenses. Monitoring of this type takes place even when the monitored firm is not in financial distress. Although in Japan it is difficult to distinguish empirically between monitoring motivated by debt and monitoring motivated by equity stake, the data indicate that shareholders monitor firms continuously, while debt holders may intervene when firm performance is poor.

PD November 1995. **TI** The Strategic Use of Relationship Banking. **AU** Yafeh, Yishay; Yosha, Oved. **AA** Yafeh: The Hebrew University of Jerusalem. Yosha: Brown University and Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 38/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 20. **PR** no charge. **JE** G18, G21, G28, K22, L13. **KW** Entry Deterrence. Glass-Steagall. Banking. Relationship Finance.

AB We explore the idea that banks operating in both the relationship banking market and the arm's length financing market invest in bank-firm ties strategically in order to compete with entrants and potential entrants to the banking sector. As it is very costly for entrants such as foreign banks to form ties with local firms, local banks increase the resources devoted to the formation of bank-firm ties, inducing firms to shift their demand for bank loans from the arm's length market - where local banks and entrants compete - to the relationship banking market. In some cases investment in bank-firm ties may actually deter entry of competitors. We analyze the implications of the model for financial markets reform. For example, reforms that facilitate entry and competition induce incumbent banks to increase investment in relationships with firms. The effect of legislation of the Glass- Steagall type on the incentive of local banks to engage in relationship banking and deter entry are also studied.

TI The Post-Issue Performance of IPO Firms When Banking is Concentrated and Universal. **AU** Ber, Hedva; Yafeh, Yishay; Yosha, Oved.

Yashiv, Eran

PD September 1995. **TI** The Determinants of Equilibrium Unemployment: Structural Estimation and Simulation of the Search & Matching Model. **AA** Tel Aviv University. **SR** Tel Aviv University, Foerder Institute for Economic Research, Working Paper: 29/95; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 38. **PR** no charge. **JE** E24, E27, J23, J63, J64. **KW** Unemployment. Vacancies. Job Search. Labor Demand. Structural Estimation.

AB This paper explores the determinants of equilibrium unemployment using the search and matching model. Using structural estimation and simulation it demonstrates the usefulness of the model in accounting for the recent experience, shared by many OECD economies, of high and persistent unemployment. The study is undertaken with Israeli employment service data which has unique qualities as it offers consistent and well defined data on unemployment, firms' vacancies and hiring, and workers' search intensity. The results show that vacancy creation, hiring and search intensity may be well accounted for by an intertemporal optimization approach with convex search costs. Firms' behavior in this respect is similar to their capital investment behavior and their cyclical demand for the two production inputs (capital and labor) follows a similar pattern. The evolution of high unemployment is explained by insufficient outflows from the unemployment pool relative to inflows. This shortfall has to do with a decline in firms' profitability which generated a fall in labor demand and with an increase in worker separation from jobs. Solving for equilibrium using the estimated parameters of the model, steady-state unemployment is determined to be 5 percent. Using this as a benchmark, simulation studies quantify the increase in hiring and search intensity and the decrease in unemployment that would be engendered by an increase in growth, in profitability or through the use of a recruiting subsidy and by a decline in the real rate of interest or in the separation rate.

Ying, John S.

TI Competition versus Regulatory Incentives in Disciplining Productive Efficiency. **AU** Shin, Richard T.;

Ying, John S.

Yosha, Oved

TI Large Shareholders and Banks: Who Monitors and How. **AU** Yafeh, Yishay; Yosha, Oved.

TI Channels of Interstate Risksharing: US 1963-1990. **AU** Asdrubali, Pierfederico; Sorensen, Bent E.; Yosha, Oved.

TI Channels of Interstate Risksharing: US 1963-1990. **AU** Asdrubali, Pierfederico; Sorensen, Bent E.; Yosha, Oved.

TI Decentralized Information and the Walrasian Outcome: A Pairwise Meetings Market with Private Values. **AU** Serrano, Roberto; Yosha, Oved.

TI Decentralized Information and the Walrasian Outcome: A Pairwise Meetings Market with Private Values. **AU** Serrano, Roberto; Yosha, Oved.

TI The Strategic Use of Relationship Banking. **AU** Yafeh, Yishay; Yosha, Oved.

TI Income and Consumption Smoothing Among U.S. States: Regions Clubs? **AU** Sorensen, Bent E.; Yosha, Oved.

TI The Post-Issue Performance of IPO Firms When Banking is Concentrated and Universal. **AU** Ber, Hedva; Yafeh, Yishay; Yosha, Oved.

Young, H. Peyton

PD December 1994. **TI** Dividing the Indivisible. **AA** Johns Hopkins University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 339; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 19. **PR** no charge. **JE** D11, D31, D63, K11. **KW** Divisibility. Goods. Negotiation. Law.

AB Indivisibilities pose a serious stumbling block to negotiations, and may even cause them to break down entirely. Why is this? The answer seems to be that an indivisible good (such as a child or a house) creates a psychological barrier that leads the claimants to think in zero-sum terms. The bargaining becomes confrontational instead of cooperative. What the parties usually fail to recognize is that there are many ways of dividing a seemingly indivisible object that allows everyone to get a reasonable portion of the pie. This paper outlines various ways of accomplishing this, and then illustrates their applications to divorce, inheritance, medical care, the environment, and international disputes over territory.

Yuen, Chi-Wa

TI Factor Mobility and Income Growth: Two Convergence Hypotheses. **AU** Razin, Assaf; Yuen, Chi-Wa.

Zeira, Joseph

TI Banking and Development. **AU** Sussman, Oren; Zeira, Joseph.

PD March 1995. **TI** Workers, Machines and Economic Growth. **AA** The Hebrew University of Jerusalem. **SR** Centre for Economic Policy Research, Discussion Paper: 1139; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 29. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** O14, O33, O41, O47. **KW** Economic Growth. Technology Adoption. Convergence. Income Distribution.

AB This paper models technology adoption as replacing workers by machines which perform the same job in the production process. The paper shows that such modeling of technology adoption affects significantly the analysis of economic growth. This model can explain large and persistent international differences in output levels and growth rates, caused by small differences in underlying parameters.

Zhang, Lei

TI Hyperinflation and Stabilization: Cagan Revisited. **AU** Miller, Marcus; Zhang, Lei.

Zhu, Ning S.

TI Uncertainty, Instrument Choice, and the Uniqueness of Nash Equilibrium: Microeconomic and Macroeconomic Examples. **AU** Henderson, Dale W.; Zhu, Ning S.

Zilcha, Itzhak

TI Stationary Ramsey Equilibrium Under Uncertainty. **AU** Becker, Robert; Zilcha, Itzhak.

TI Multiple Uncertainty, Forward-Futures Markets and International Trade. **AU** Viaene, Jean-Marie; Zilcha, Itzhak.

TI The Value of Information: The Case of Signal-Dependent Opportunity Sets. **AU** Sulganik, Eyal; Zilcha, Itzhak.

PD April 1996. **TI** Altruism, Economic Growth and Income Distribution. **AA** Johns Hopkins University and Tel Aviv University. **SR** Johns Hopkins University, Department of Economics, Working Paper: 365; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 18. **PR** no charge. **JE** D11, D51, D91, E13. **KW** Overlapping Generations. Altruism. Growth. Income Distribution.

AB We consider an overlapping-generations economy where the aggregative production process uses physical capital and human capital. The human capital level of each individual is determined by the direct investment in education and some random "ability". The parents' investment in the education of their offspring is motivated by altruism. We distinguish between two types of transfers: The investment of parents in the education of their offspring, which affects his/her future income, and the direct capital transfer (the "bequest motive"). We show that the intensity of each type of altruism plays an important role on the equilibrium growth and the income distributions, but the results differ significantly. Comparing competitive equilibria from the same initial capital and human capital distributions we derive the following results: (a) When altruism is more "education-inclined" then economic growth is higher and the intragenerational income distributions are more equal (less equal), in all periods, if the production function's elasticity of substitution is larger (smaller) than 1 (b) When altruism is more "bequest-inclined" the growth rate is lower and the impact on the intragenerational distributions of income depends on the size of the elasticity of substitution.

Zilibotti, Fabrizio

TI Endogenous Growth and Poverty Traps in a Cournotian Model. **AU** Gali, Jordi; Zilibotti, Fabrizio.

Zoega, Gylfi

TI Unemployment Persistence: Does the Size of the Shock

Matter? **AU** Bianchi, Marco; Zoega, Gylfi.

TI Quiting Externalities, Employment Cyclicality and Firing Costs. **AU** Booth, Alison L.; Zoega, Gylfi.