

## 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)

### Abdel, Rahman Hesham

**PD** October 1988. **TI** Efficiency Through Decentralization with Product Diversity. **AU** Abdel, Rahman Hesham; Henderson, J. Vernon. **AA** Abdel-Rahman: University of New Orleans. Henderson: Brown University. **SR** Brown University Department of Economics Working Paper: 88-22; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 21. **PR** No charge. **JE** 612, 613, 931. **KW** Imperfect Competition. Regulation. Urban Economics.

**AB** This paper places the monopolistic competition model of product diversity in an urbanized context. There, national government regulation is not required for Pareto efficiency. This is in contrast to the vast literature which presumes central government intervention in the form of pricing rules, lump sum taxes, and/or regulation of scope is required for Pareto efficiency with imperfect competition. In fact, all that is required is a Tiebout-like environment. Individual cities acting on their own have the incentive to regulate their own activities. Such independent local regulation will lead nationally to an efficient allocation of resources.

### Abowd, John M.

**PD** May 1988. **TI** Market Structure, Strike Activity, and Union Wage Settlements. **AU** Abowd, John M.; Tracy, Joseph S. **AA** Abowd: Cornell University. Tracy: Yale University. **SR** National Bureau of Economic Research Working Paper: 2595; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 41. **PR** \$2.00. **JE** 832, 833, 611, 824. **KW** Wage Settlements. Labor Contracts. Unions. Strikes. Market Structure. Market Power.

**AB** We attempt a synthesis of the industrial relations market structure hypothesis with the modern asymmetric information theory of wage and strike outcomes. The industrial relations literature contains a variety of arguments indicating that wage settlements should be positively related to the degree of product market sales concentration and the degree of product market coverage by the union. An asymmetric information bargaining model is specified that relates these same variables to strike probabilities as well as wage settlements. Our empirical analysis is conducted for the periods from 1970-1980 (strikes) and 1976-1980 (wages). We find that the relation between trade-adjusted sales concentration and wage settlements is positive at low levels of concentration but negative at high levels of concentration.

### Ahtiala, Pekka

**PD** July 1988. **TI** A Note on Fiscal Policy under Flexible Exchange Rates. **AA** University of Tampere, Finland.

**SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 797; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 9. **PR** no charge. **JE** 623, 321, 431. **KW** Exchange Rates. Fiscal Policy. Money Demand.

**AB** The paper studies the effects of fiscal policy under flexible exchange rates. The demand for real money balances, in terms of the expenditure basket of goods, is a function of income in terms of the same basket. It turns out that fiscal expansion is expansionary, neutral, or contractionary in the money wage model depending on whether the income elasticity of the demand for money is smaller than, equal to, or greater than one. The price of domestic goods rises, is unchanged, or declines in this model depending on whether the income elasticity is smaller than, equal to, or greater than one.

### Aigner, Dennis J.

**PD** April 1989. **TI** Experimental Design for Direct Metering of Residential Electricity End-Uses. **AU** Aigner, Dennis J.; Schonfeld, Peter. **AA** Aigner: University of California, Irvine. Schonfeld: University of Bonn. **SR** Universität Bonn Sonderforschungsbereich 303 - Discussion Paper: B-109; Sonderforschungsbereich 303 an der Universität Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 22. **PR** no charge. **JE** 635, 723. **KW** Electricity. Demand Function.

**AB** Measuring the continuous electricity loads associated with major appliances by direct means is expensive. Yet for planning and forecasting purposes, knowledge of their load profiles is important. Conditional Demand Analysis (CDA) exploits the differences in appliance ownership patterns among households to disaggregate continuous readings on total household consumption. This approach is obviously cheaper than direct metering at least it is with existing technology but does not always result in sufficiently precise load estimates. The present paper develops a statistical model within which the question of direct metering as a supplement to CDA can be addressed in the case of two appliances. Optimality conditions on the precision of estimation for the two loads give rise to exact solution results for sample sizes to be devoted to direct metering.

### Aizenman, Joshua

**PD** February 1989. **TI** Inward vs. Outward Growth Orientation in the Presence of Country Risk. **AA** The Hebrew University. **SR** National Bureau of Economic Research Working Paper: 2868; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** \$2.00. **JE** 441, 421, 411, 112. **KW** Credit

## 2 ABSTRACTS

Market. Capital Market. Trade Relations. Developing Countries.

**AB** The purpose of this paper is to model the role of trade dependency in determining the access of a developing economy to the international credit market, and its desirable growth strategy. With full integration of capital markets the choice with respect to the inwardness of a technology is irrelevant: investment will be channeled to the more productive sectors, independently of their trade inwardness. With limited capital market integration, a given investment will generate two effects. The first is the standard, direct productivity effect that is associated with the change in future output. The second is the trade dependency externality, generated by the change in future bargaining outcomes due to the change in the trade dependency of the nation. With partial integration, investment that increases trade dependency is desirable.

### **Altig, David**

**PD** May 1989. **TI** Altruism, Borrowing Constraints, and Social Security. **AU** Altig, David; Davis, Steve J. **AA** Altig: Indiana University. Davis: University of Chicago and Hoover Institution. **SR** Stanford Hoover Institute Working Paper in Economics: E-89-16; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 54. **PR** no charge. **JE** 321, 915, 921. **KW** Social Security. Altruism, Borrowing Constraints. Aggregate Savings. Intergenerational Transfers. Fiscal Policy.

**AB** We show how intergenerational altruism and borrowing constraints shape the interest rate, savings and welfare response to funded and unfunded social security programs. Borrowing constraints pin down the optimal timing of altruistic intergenerational transfers and thereby alter the implications of intergenerational altruism for fiscal policy. Regardless of whether parent-to-child altruistic transfer motives operate, borrowing constraints imply effects of social security programs that deviate greatly from the effects in Ricardian and traditional life cycle environments. If, however, child-to-parent altruistic gift motives operate in at least some families, social security programs are neutral in their impact on the interest rate, though not necessarily in their impact on consumption.

### **Amel, Dean F.**

**PD** June 1989. **TI** Dynamics of Market Concentration. **AU** Amel, Dean F.; Liang, J. Nellie. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 74; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. **PG** 25. **PR** no charge. **JE** 312, 611, 613. **KW** Legal Barriers. Market Concentration. Banking. Commercial Banks.

**AB** This paper estimates the speed at which local banking market concentration adjusts to its long run equilibrium level. Long run market concentration is estimated as a function of the benefits and costs of entry into the market. The empirical results from panel data for over 2000 local banking markets over 5, 10, 15 and 20 years show that concentration levels in local banking markets adjust slowly over time. Markets with unusually high or low profits show significantly more rapid adjustment than other markets over shorter time periods, but the differences are small in magnitude. Legal barriers to entry significantly impede market adjustment over longer time periods.

**PD** August 1989. **TI** Do Firms Differ Much?. **AU** Amel, Dean F.; Froeb, Luke. **AA** Amel: Board of Governors of the Federal Reserve System. Froeb: University of Chicago. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 87; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 11 text, 16 total. **PR** no charge. **JE** 611, 312. **KW** Profits. Firm Effects. Banking. Commercial Banks.

**AB** With firm profitability data for a cross section of geographic markets, it is possible to determine the relative importance of firm and market effects on profitability. Analysis of variance from a panel of multibank holding companies in Texas suggests that firm effects are more important than market effects in determining profitability, and that the magnitudes of the effects vary over time.

### **Amihud, Yakov**

**PD** March 1989. **TI** Index and Index-Futures Returns. **AU** Amihud, Yakov; Mendelson, Haim. **AA** Amihud: Tel Aviv University. Mendelson: University of Rochester. **SR** New York University Salomon Brothers Center Working Paper: 513; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 25. **PR** \$4.00. **JE** 313, 311. **KW** Futures. Stock Indices. Stock Market. Stock Prices. Portfolios.

**AB** This paper presents a model of securities price adjustment whose predictions are consistent with the empirical evidence on the return behavior of stock indices and stock index-futures. The model explains the recent finding that index futures returns are more volatile and have a lower autocorrelation than the corresponding returns on the stock index. These differences stem from the faster adjustment of prices to value changes in the futures market, and from the diversification of the security-specific market noise in the index. We test our model and the results are consistent with its predictions.

### **Anderson, Keith B.**

**PD** May 1989. **TI** Regulation, Market Structure, and Hospital Costs: A Comment on the Work of Mayo and McFarland. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 173; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 19. **PR** no charge. **JE** 613, 913. **KW** Hospital Costs. Medical Costs. Regulations.

**AB** This paper provides a critique of a recent paper in the Southern Economic Journal concerning the effectiveness of Certificate of Need (CON) regulation in controlling hospital costs. The major problem with the paper is that CON only affects costs through the number of beds a hospital operates. In addition, the measure of CON stringency suffers from endogeneity problems and the analysis is restricted to a single state where all CON decisions are made by the same agency governed by the same law. When we reestimate the model using a dataset where variation in CON stringency can be observed and correcting for the other problems in their analysis, we find that CON regulation has not been effective in reducing hospital costs.

**Anderson, Ronald**

**PD** April 1989. **TI** Securitization and Commodity Contingency in International Lending. **AU** Anderson, Ronald; Gilbert, Christopher; Powell, Andrew. **AA** Anderson: City University of New York. Gilbert: Queen Mary College. Powell: Nuffield College, Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 295; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 24. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** 433, 121, 026. **KW** Debt. Sovereign Risk. Securitization. Developing Countries.

**AB** Securitization of LDC debt would significantly aid the international debt problem by increasing liquidity and expanding the range of investors. Securitization is problematic, however, in large part due to sovereign risks involved. At present sovereign risks, commodity price risks and currency risks remain unbundled in general obligation loan contracts. Using a game theoretic model we illustrate the need to separate sovereign risks from other risks and associate the sovereign default with a third party guarantee, whose fair-value premium can be calculated. We argue that issuing commodity price contingent assets may provide the best means of securitizing LDC obligations.

**Angrist, Joshua D.**

**PD** March 1989. **TI** Selection for Military Service in the Vietnam Era. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 250; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 38. **PR** \$1.50. **JE** 813, 114, 917. **KW** Draft Lottery. Veterans. Military.

**AB** In discussions of the incidence of Vietnam era military service, it is often observed that blacks were over-represented among draftees in the early 1970's. The racial composition of the armed forces, however, was determined jointly by armed forces eligibility criteria and voluntary enlistment as well as by the failure of draftees to avoid conscription. The interaction of these selection criteria makes it impossible to use the armed forces racial mix as prima facie evidence regarding the burden of conscription. In this paper, a modeling strategy is developed that may be used to identify some of the parameters affecting the process of selection for military service. The approach taken here exploits the fact that in the early 1970's, the risk of conscription was randomly allocated in a series of lotteries.

**PD** April 1989. **TI** Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 251; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 74. **PR** \$2.00. **JE** 824, 813, 851. **KW** Military Service. Labor Markets. Draft Lottery. Veterans. Wages. Experience.

**AB** Estimates of the effect of veteran status on civilian earnings may be biased by the fact certain types of men are more likely to serve in the armed forces. In this paper, an estimation strategy is employed that enables measurement of the effects of veteran status while controlling for differences in other personal characteristics related to earnings. The randomly assigned risk of induction generated by the Vietnam era draft lottery is used to construct instrumental variables that are correlated with earnings solely by virtue of their correlation with veteran status. Instrumental variables estimates tabulated

from Social Security Administration records indicate that in the early 1980s the earning of white veterans were approximately 15 percent less than nonveteran earnings. In contrast, there is no evidence that nonwhite veterans suffered any lasting reduction in earnings.

**PD** May 1989. **TI** Why do World War II Veterans Earn More Than Nonveterans. **AU** Angrist, Joshua D.; Krueger, Alan B. **AA** Princeton University. **SR** National Bureau of Economic Research Working Paper: 2991; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** \$2.00. **JE** 824, 851, 114. **KW** Veterans. Human Capital. Military Service. Labor Market. Wages. Employment.

**AB** Veterans of World War II are widely believed to earn more than nonveterans of the same age. Theoretical justifications for the World War II veteran premium include the subsidization of education and training, and preference for veterans in hiring. In this paper, we propose and test an alternative view: that the observed World War II veteran premium reflects the fact that men with higher earnings potential were more likely to have been selected into the Armed Forces. An empirical strategy is developed that allows estimation of the effects of veteran status while controlling for correlation with unobserved earnings potential. Empirical results from the 1960, 1970, and 1980 Censuses, along with two micro data sets, support a conclusion that World War II veterans earn no more than comparable nonveterans, and may well earn less.

**PD** May 1989. **TI** Why Do World War II Veterans Earn More Than Nonveterans?. **AU** Angrist, Joshua D.; Krueger, Alan B. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 254; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 54. **PR** \$2.00. **JE** 824, 813. **KW** Veteran. World War II. Selectivity Bias. Conscription. Wages.

**AB** Veterans of World War II are widely believed to earn more than nonveterans of the same age. Theoretical justifications for the World War II veteran premium include the subsidization of education and training, and preference for veterans in hiring. In this paper, we propose and test an alternative view: that the observed World War II veteran premium reflects the fact that men with higher earnings potential were more likely to have been selected into the armed Forces. Empirical results from the 1960, 1970, and 1980 Censuses, along with two other micro data sets, support a conclusion that World War II veterans earn no more than comparable nonveterans, and may well earn less.

**Arellano, Manuel**

**PD** February 1989. **TI** Using Complementary Data Sources: An Application to Labour Supply and Job Search. **AU** Arellano, Manuel; Meghir, Costas. **AA** Arellano: Oxford Institute of Economics and Statistics. Meghir: University College London. **SR** University College London Discussion Paper: 89-06; Department of Economics, University College London, Gower Street, London, WC1E 6BT, ENGLAND. **PG** 50. **PR** no charge. **JE** 229, 824, 211. **KW** Data Sources. Identification. Job Search. Labor Supply.

**AB** It is often the case that the information available in any one survey or panel is not sufficient for identifying a particular structural model. Moreover, since a 'super' data set containing

all the information that might be required is neither feasible nor necessarily desirable, it is important to develop suitable methods for estimating models from more than one data source. The issue here relates to identification: to the extent that the economic model is identified from combining, say, two or more data sets, these data sets can be thought of as complementary. This paper contains two main parts. In the first we discuss identification and estimation of models from different data sources. In the second, we develop a model of labor supply which is consistent with intertemporal optimization under uncertainty in the presence of job search activity and is estimated using two complementary data sets.

#### Arnim, Annelie

**PD** January 1989. **TI** Permutahedron of Series-Parallel Posets. **AU** Arnim, Annelie; Faigle, Ulrich; Schrader, Rainer. **AA** Arnim and Schrader: University of Bonn. Faigle: University of Twente. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: 89563-OR; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 7. **PR** no charge. **JE** 213. **KW** Permutahedron. Paralell Posets. Facets.

**AB** We give a linear description of the permutahedron of series-parallel posets and characterize the facets.

#### Arnott, Richard

**PD** June 1988. **TI** Information and Time-of-Use Decisions in Stochastically Congestible Facilities. **AU** Arnott, Richard; de Palma, Andre; Lindsey, Robin. **AA** Arnott: Queen's University. de Palma: Northwestern University. Lindsey: University of Alberta. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 788; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 72. **PR** no charge. **JE** 022, 026. **KW** Overcrowding. Capacity. Firm Size. Allocation.

**AB** In this paper we investigate the impact of information on individuals' time of use of a congestible facility subject to stochastic fluctuations in demand and capacity. We solve for the continuous time equilibrium rate of use and for optimal (no-toll) design capacity for three information regimes: Full information (in which users know both demand and capacity when deciding whether and when to use the facility), zero information (in which users know only the joint probability distribution of demand and capacity), and partial information.

**PD** December 1988. **TI** A General Equilibrium Spatial Model of Housing Quality and Quantity. **AU** Arnott, Richard; Braid, Ralph; Davidson, Russell; Pines, David. **AA** Arnott: Boston College and Queen's University. Braid: Wayne State University. Davidson: University of Aix-Marseille, France and Queen's University. Pines: Tel Aviv University. **SR** Queen's Institute for Economic Research Discussion Paper: 739; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 55. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** 932, 022, 931. **KW** Housing. Households. Urban Economics.

**AB** This paper examines the properties of stationary-state general equilibrium in a monocentric city with durable housing. On the demand side, identical households choose location, housing quality and quantity (floor area), and other goods. On the supply side, developers choose the structural density and

time path of quality (which depends on construction quality and maintenance) of buildings. Under a certain set of assumptions, existence and uniqueness of equilibrium are proved, and its comparative static/dynamic properties determined.

#### Arrow, Kenneth J.

**PD** April 1989. **TI** A "Dynamic" Proof of the Frobenius-Perron Theorem for Metzler Matrices. **AA** Stanford University. **SR** Stanford Institute for Mathematical Studies in the Social Sciences (Economic Series) Technical Report: 542; IMSSS, Encina Hall, Fourth Floor, Stanford University, Stanford, CA 94305. **PG** 9. **PR** \$4.00. **JE** 213, 021. **KW** Metzler Matrices. Dominant Root. Stability. Linear System. Dynamic System.

**AB** Metzler matrices (those with non-negative off-diagonal elements) are of frequent occurrence in mathematical economics (e.g., input-output matrices). It is well known (Frobenius, Perron) that a Metzler matrix has a real characteristic root which has a larger real part than any other root and which is associated with a semi-positive characteristic vector. It is less well known that a linear dynamic system with a Metzler kernel and non-negative forcing will have a strictly positive solution if the initial point is strictly positive. The second property is not deducible from the first. In this note, it is shown that the dynamic property permits a simple proof of the Frobenius-Perron theorem.

#### Artis, M. J.

**PD** March 1989. **TI** Wages and Prices in Europe: A Test of the German Leadership Thesis. **AU** Artis, M. J.; Nachane, D. **AA** Artis: University of Manchester. Nachane: University of Bombay. **SR** Centre for Economic Policy Research Discussion Paper: 296; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 19. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** 423, 431, 432, 134. **KW** Wages. Prices. European Monetary System. Inflation.

**AB** The paper presents various tests of the hypothesis that, through the mechanism of the European Monetary System, Germany exercised a counter-inflationary leadership role in the 1980s. Evidence is provided that expectations of German inflation may be thought of as having impacted more strongly on expectations of inflation in other EMS countries in the EMS period than on non-EMS countries (the UK) and in earlier periods. Co-integration tests show inflation rates in partner EMS member countries to be cointegrated with inflation in Germany in the EMS period, but the same is true for the UK suggesting that the EMS arrangements could not have been responsible. Co-integration tests also reveal that bilateral exchange rates have not been particularly stable in this period and do not follow PPP.

#### Ashenfelter, Orley

**TI** An Experimental Comparison of Alternative Arbitration Systems. **AU** Currie, Janet M.; Ashenfelter, Orley; Spiegel, Matthew.

#### Ashton, Paul

**TI** The Poverty Trap and the Laffer Curve - What Can the GHS Tell Us?. **AU** Minford, Patrick; Ashton, Paul.

**Auerbach, Alan J.**

**PD** February 1989. **TI** The Dynamics of an Aging Population: The Case of Four OECD Countries. **AU** Auerbach, Alan J.; Hagemann, Robert; Kotlikoff, Laurence J.; Nicoletti, Giuseppe. **AA** Auerbach: University of Pennsylvania. Hagemann and Nicoletti: OECD. Kotlikoff: Boston University. **SR** National Bureau of Economic Research Working Paper: 2797; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$2.00. **JE** 841, 111, 021, 321. **KW** Bequests. Dynamic Model. Demographics. Overlapping Generations.

**AB** Demographic changes, such as those anticipated in most OECD countries, have many economic effects that impinge on a country's fiscal viability. Evaluation of the effects of associated changes in capital-labor ratios and the welfare and behavior of different generations requires the use of a dynamic general equilibrium model. The 75 generations - 250 year demographic simulation model, presented in Auerbach and Kotlikoff (1987, Chapter 11), has been modified to incorporate bequest behavior, technological change, the possibility that the economy is open to international trade, and government consumption expenditures that depend on the age composition of the population. The model has been further adapted to study the effects of impending demographic changes in Japan, the Federal Republic of Germany, Sweden and the United States.

**Ausubel, Lawrence**

**PD** September 1988. **TI** Efficient Sequential Bargaining. **AU** Ausubel, Lawrence; Deneckere, Raymond. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 804; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 53. **PR** no charge. **JE** 026, 022. **KW** Bargaining. Game Theory. Sequential Equilibrium. Incomplete Information.

**AB** This paper establishes that efficient outcomes of static bargaining with two-sided incomplete information can be achieved in infinite horizon, offer-counteroffer games. The entire ex ante Pareto frontier can often be reached by equilibria of the standard games in which a single player successively makes offers. Our equilibria are sequential and stationary, but do not utilize delay as a screening device; they have the property that most information revelation and most trade occurs in the initial two periods.

**Baily, Martin Neil**

**PD** April 1989. **TI** Measurement Issues, the Productivity Slowdown, and the Explosion of Computer Power. **AU** Baily, Martin Neil; Gordon, Robert J. **AA** Baily: The Brookings Institution, Washington DC. Gordon: Northwestern University. **SR** Centre for Economic Policy Research Discussion Paper: 305; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 61. **PR** \$4.00. **JE** 226, 621, 825. **KW** Growth. Productivity. Computers. Technological Change. Measurement Error.

**AB** One of the starkest differences between the recent economic performance of the US and of Europe, in addition to faster job creation in the US, is its slower productivity growth. This paper begins with data showing that US productivity growth has been essentially zero since 1973 outside of

manufacturing. In contrast, productivity growth in US manufacturing has revived since 1979, and over the period 1979-87 has actually been more rapid than during the 1948-73 'golden age'.

**Baldwin, Richard**

**PD** August 1988. **TI** The Mutual Amplification Effect of Exchange Rate Volatility and Unresponsive Trade Prices. **AU** Baldwin, Richard; Lyons, Richard. **AA** Columbia University. **SR** National Bureau of Economic Research Working Paper: 2677; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** \$2.00. **JE** 431, 411, 311, 023. **KW** Exchange Rates. Monetary Model. Trade Prices.

**AB** The volatility of flexible exchange rates greatly exceeds what most analysts anticipated at the advent of generalized floating. The Dornbusch overshooting model accounts for the fact that exchange rates fluctuate more than the underlying fundamentals. This paper presents a model which may help account for why exchange rates have been even more volatile than the overshooting model would suggest, and why trade prices have been so unresponsive in recent years. The paper employs an extended version of the sticky-price monetary model of exchange rates and a simple industrial organization model of import pricing. The combined macro-I.O. model shows that exchange rate volatility and unresponsive trade prices can be mutually amplifying.

**PD** January 1989. **TI** Exchange Rate Hysteresis: The Real Effects of Large vs. Small Policy Misalignments. **AU** Baldwin, Richard; Lyons, Richard. **AA** Columbia University. **SR** National Bureau of Economic Research Working Paper: 2828; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** \$2.00. **JE** 431, 111, 411, 023. **KW** Exchange Rates. Trade Balance. Path Dependent. Dynamic Model.

**AB** Using the sticky price monetary model of exchange rate determination and the sunk cost model of trade hysteresis, we show that a sufficiently large policy misalignment can induce hysteresis in the trade balance and thereby alter the steady-state real exchange rate. Thus in our model exchange rate dynamics are path dependent, PPP need not hold and money need not be neutral even in the very long run. We present only positive analysis but conjecture that the results have strong welfare, policy, and econometric implications. Since hysteresis in our model can entail industrial dislocation and the scrapping of sunk assets, we suggest that these factors may constitute a welfare cost of large policy misalignments that have not been formally considered.

**Balke, Nathan S.**

**PD** August 1988. **TI** The Estimation of Prewar GNP: Methodology and New Evidence. **AU** Balke, Nathan S.; Gordon, Robert J. **AA** Balke: Southern Methodist University. Gordon: Northwestern University. **SR** National Bureau of Economic Research Working Paper: 2674; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 60. **PR** \$2.00. **JE** 221, 131, 227. **KW** Methodology. Output. Price Index. Economic Fluctuations.

**AB** The paper develops new methodology for the estimation of prewar GNP, taps previously unused data sources, and develops new estimates for the periods 1869-08 and 1869-28. The new estimates of real GNP are as volatile on average over

the business cycle as the traditional Kuznets-Kendrick series but dampen the amplitude of some cycles while raising the amplitude of others. The new estimates of the GNP deflator are distinctly less volatile than the traditional series and in fact no more volatile than in the postwar period.

### Barany, Imre

**PD** May 1989. **TI** On Integer Points in Polyhedra: A Lower Bound. **AU** Barany, Imre; Howe, Roger; Lovasz, Laszlo. **AA** Barany: Mathematical Institute, Budapest, Hungary. Howe: Department of Mathematics, Yale University. Lovasz: Department of Computer Science, Eotvos University, Budapest and Princeton University. **SR** Yale Cowles Foundation Discussion Paper: 917; Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 11. **PR** no charge. **JE** 213. **KW** Polyhedra. Integral Points. Dirichlet Unit Theorem.

**AB** Given a polyhedron we write  $P(I)$  for the convex hull of the integral points in  $P$ . It is known that  $P(I)$  can have at most  $O(f(n-1))$  vertices if  $P$  is a rational polyhedron with size  $f$ . Here we give an example showing that  $P(I)$  can have as many as  $\Omega(f(n-1))$  vertices. The construction uses the Dirichlet unit theorem.

### Barclay, Michael

**PD** September 1987. **TI** Corporate Payout Policy: Cash Dividends versus Share Repurchases. **AA** University of Rochester. **SR** University of Rochester Managerial Economics Research Center Working Paper: 87-06; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY 14627. **PG** Not available. **PR** NC single copy. **JE** 521, 522, 511, 514. **KW** Dividends. Corporate Strategy. Corporations. **AB** No abstract.

### Barro, Robert J.

**PD** February 1989. **TI** A Cross-Country Study of Growth, Saving and Government. **AA** Harvard University. **SR** National Bureau of Economic Research Working Paper: 2855; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** \$2.00. **JE** 111, 123, 321, 023. **KW** Economic Growth. Government Policy. Macroeconomic Model. Growth Theory.

**AB** Model of endogenous economic growth can generate long-term growth without relying on exogenous changes in technology or population. A general feature of these models is the presence of constant or increasing returns in the factors that can be accumulated. I use some models of this type to study the termination of per capita growth, investment in physical and human capital, and population growth. The determinants of these variables involve aspects of government policy -- including public infrastructure services, maintenance of property rights, government consumption, and taxation -- and the initial level of per capita income. I examine the predicted relationships by using a cross-country sample that expands on the Summer-Heston set of about 120 countries.

### Barron, Terry

**PD** February 1989. **TI** Some New Results in Testing for Economies of Scale in Computing: 1985 and 1988 Data. **AA** University of Rochester. **SR** University of Rochester

Managerial Economics Research Center Working Paper: 89-01; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY 14627. **PG** 14. **PR** no charge. **JE** 512, 631. **KW** Grosch's Law. Economies of Scale. Computers.

**AB** We propose a new specification of models used to test for the presence of economies of scale in processing power. Theoretical considerations lead to the addition of indicator variables for system manufactures to previously used models. An analysis of data for systems available in 1985 (which has been analyzed previously in the literature) is consistent with our specification. We also analyze a new set of data for systems available in 1988 with the same method. These results are also consistent with our specification and imply statistically significant diseconomies of scale.

### Batchelder, Ronald W.

**PD** September 1988. **TI** The Encomienda and the Optimizing Imperialist: An Interpretation of Spanish Imperialism in the Americas. **AU** Batchelder, Ronald W.; Sanchez, Nicolas. **AA** Batchelder: University of California, Los Angeles. Sanchez: College of the Holy Cross. **SR** University of California at Los Angeles Department of Economics Working Paper: 501; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 33. **PR** \$2.50. **JE** 047, 114. **KW** Human Capital. Property Rights. Spain. Colonization. Defense Spending.

**AB** This paper develops a new interpretation of Spanish imperial policies in the Americas assuming the objective of the Spanish Crown was to maximize its wealth through the efficient acquisition, protection and exploitation of distant territorial claims. The Crown's most controversial policy was the rewarding of conquistadors by grants of temporary encomiendas, or temporary rights to collect tribute from Indians in a given area.

### Batz, David A.

**PD** August 1989. **TI** A Theory of Bust-Up Takeovers and Takeover Defenses. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 567; Department of Economics, UCLA, 2263 Bunche, Los Angeles, CA 90024. **PG** 26. **PR** \$2.50. **JE** 514, 611, 313. **KW** Takeovers. Tender Offer. Shareholders. Negotiations.

**AB** Many takeover models treat corporations as single individual wholes rather than as bundles of assets each part of which might be affected by a contest. Here management and shareholders contest the operation of individual assets, and can resolve their differences through negotiations rather than more costly tender offers. Four results emerge. First, large minority shareholders wield ongoing control by employing takeover threats. Second, a hostile tender offer can demonstrate that the bidder has low takeover costs. Third, management may employ short-term debt to bond its promises to sell assets. Finally, a large risk neutral shareholder always profits from the purchase of additional shares.

### Bauer, Laura L.

**TI** Tolerance-Width Groupings for Editing Banking Deposits Data: An Analysis of Variance of Variances. **AU** Pierce, David; Bauer, Laura L.

**Bean, Charles**

**PD** April 1989. **TI** Ten Years of Mrs. T. **AU** Bean, Charles; Symons, James. **AA** Bean: London School of Economics. Symons: University College London. **SR** Centre for Economic Policy Research Discussion Paper: 316; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 77. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** 824, 825, 831, 832, 133. **KW** Unemployment. Productivity. England. Unions. Collective Bargaining.

**AB** We argue that the 1970s were characterized by attempts to maintain a cooperative, low unemployment equilibrium in the face of considerable union power, through use of incomes policies and neo-corporatist machinery. The 1980s saw a shift away from this, towards direct measures to limit union power. This, together with the adoption of tight macroeconomic policies, explains the initial rise in unemployment. The reduction in union power also helps to explain the acceleration in productivity growth. The craft nature of much of the British union movement has led to a multiplication of bargaining units within firms. Bargaining in isolation a union can perceive overmanning and other restrictive practices as being in its interests, resulting in low wages and productivity. A fall in union power results in a reduction in these inefficiencies and leads not only to a rise in productivity but also in wages.

**Beaudry, Paul**

**PD** May 1989. **TI** Long-Term Contracts and Equilibrium Models of the Labor Market: Some Favorable Evidence. **AU** Beaudry, Paul; DiNardo, John. **AA** Beaudry: Universite de Montreal. DiNardo: Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 252; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 34. **PR** \$1.50. **JE** 824, 821, 133. **KW** Implicit Contracts. Labor Market. Wage Determination. Labor Demand. Wages. Employment.

**AB** In this paper we develop and test a very general implication of competitive contractual arrangements in the labor market. Toward this end we examine whether the level of unemployment prevailing at the beginning of the job has lasting effects on wage payments throughout the job. The intuition behind this test is straightforward. If the labor market functions as a competitive contracting market, then it is the supply and demand conditions at the time of negotiating the contract that determines the wage provisions of the contract. We find that wages strongly depend on the labor market conditions prevailing at the beginning of one's job.

**Beenstock, Michael**

**PD** March 1989. **TI** The Factorial Distribution of Income in the Union Bargaining Model. **AA** Hebrew University. **SR** Centre for Economic Policy Research Discussion Paper: 288; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 32. **PR** \$4.00. **JE** 831, 832, 824. **KW** Bargaining. Unions. Wage Share.

**AB** Attention is focused on the implications of the Union Bargaining Model (UBM) for the factorial distribution of income. It is shown that when the contract curve is given, greater union bargaining power raises the wage share. We argue, however, that the factors that strengthen the bargaining power of unions are likely to induce offsetting shifts in the

contract curve. A simulation exercise indicates that the shift in the contract curve is likely to be of secondary importance in determining the wage share.

**PD** April 1989. **TI** A Democratic Model of the 'Rent-Sought' Benefit Cycle. **AA** The Hebrew University, Israel. **SR** Centre for Economic Policy Research Discussion Paper: 289; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 25. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** 025, 024. **KW** Democracy. Public Choice. Political Economy. Majority Voting. Lobby Groups. Externality.

**AB** Lobby groups press for various administrative concessions which are granted at the expense of the rest of society. This paper tries to explain why sometimes the rest of society does not prevent the lobbies from exploiting them while at other times it protests against the injustice. It also suggests why after a while the public may demand a reform in which the concessions are abolished. The basic analytical insight is that there may be an externality to successful lobbying; when one group succeeds this establishes a precedent that makes it easier for other groups to succeed. The chain reaction that is thus triggered may be to the advantage of a majority of the electorate.

**Berg, Andrew**

**PD** June 1988. **TI** The Debt Crisis: Structural Explanations of Country Performance. **AU** Berg, Andrew; Sachs, Jeffrey. **AA** Berg: National Bureau of Economic Research. Sachs: Harvard University. **SR** National Bureau of Economic Research Working Paper: 2607; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** Not available. **PR** \$2.00. **JE** 121, 443, 422. **KW** Debt Rescheduling. Developing Countries. Income Distribution. Trade Policy.

**AB** This paper develops a cross-country statistical model of debt rescheduling, and the secondary market valuation of LDC debt, which links these variables to key structural characteristics of developing countries, such as the trade regime, the degree of income inequality, and the share of agriculture in GNP. Our most striking finding is that higher income inequality is a significant predictor of higher probability of debt rescheduling in a cross section of middle-income countries. We attribute this correlation to various difficulties of political management in economies with extreme inequality. We also find that outward orientation of the trade regime is a significant predictor of a reduced probability of debt rescheduling.

**Berger, Allen N.**

**PD** December 1988. **TI** Collateral, Loan Quality, and Bank Risk. **AU** Berger, Allen N.; Udell, Gregory. **AA** Berger: Board of Governors of the Federal Reserve. Udell: Board of Governors of the Federal Reserve and New York University. **SR** New York University Salomon Brothers Center Working Paper: 502; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 19. **PR** no charge. **JE** 315, 312. **KW** Collateral. Credit Risk. Commercial Loans. Banking.

**AB** Most commercial loans are made on a secured basis, yet little is known about the relationship between collateral and

credit risk. Several theoretical papers find that when borrowers have private information about risk, the lowest risk borrowers tend to pledge collateral. In contrast, conventional wisdom in banking holds that when risk is observable, the highest risk borrowers tend to pledge collateral. An additional issue is whether secured loans (as opposed to secured borrowers) tend to be safer or riskier than unsecured loans. The empirical evidence in this paper strongly suggests that collateral is most often associated with riskier borrowers, riskier banks.

**PD** July 1989. **TI** Some Red Flags Concerning Market Value Accounting. **AU** Berger, Allen N.; Kuester, Kathleen A.; O'Brien, James M. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 85; C/O Jeffrey Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 31. **PR** no charge. **JE** 312, 541. **KW** Accounting. Commercial Banks. Asymmetric Information. Credit Risk. Market Value.

**AB** Conceptual, measurement, and incentive problems with implementing market value accounting for commercial banks are discussed. A major conceptual problem is defining market values for loans that are essentially unmarketable due to insufficient public information. Information problems also create serious difficulties for measuring changes in credit risk, and incentives problems make it difficult to elicit from bank management valuations that reflect the bank's private information. External sources of market information that are not dependent on bank reporting may be of only limited help in solving these problems. A set of positive recommendations for developing a more realistic accounting system is given.

### Bergin, James

**PD** July 1989. **TI** Efficiency and Renegotiation in Repeated Games. **AU** Bergin, James; MacLeod, W. Bentley. **AA** Bergin: Queen's University. MacLeod: Universitat Autònoma de Barcelona, Spain. **SR** Queen's Institute for Economic Research Discussion Paper: 752; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 31. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** 026. **KW** Efficiency. Renegotiation. Repeated Games. Game Theory. Cooperative Games.

**AB** In this paper we introduce a general framework for the discussion of renegotiation in repeated games, provide a new concept of "renegotiation proof" equilibrium and how this model clarifies and unifies existing work in this area.

### Bergman, Yaacov Z.

**PD** November 1988. **TI** On Equilibrium Price Ranges. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 88-27; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 13. **PR** No charge. **JE** 313, 227. **KW** Prices. Assets. Capital Market. Asset Pricing.

**AB** It is shown that equilibrium conditions impose restrictions on ranges of price processes. Specifically, it is shown the upper and the lower barriers on the price of a risky asset at any given time, are themselves bounded by the discounted upper and lower barriers, respectively, on the price at any later time. It is also shown as a result, that in the presence of a positive riskless yield, a constant finite barrier on the price of a risky asset is inconsistent with equilibrium, (with an analogous result for the lower barrier). It is shown, on the other hand, that if there is a finite upper barrier on prices, then

it must grow at least as fast as the interest rate. It is stressed that these restrictions must be implemented when modeling asset prices.

### Berkovec, James

**PD** January 1989. **TI** The General Equilibrium Effects of Inflation on Housing Consumption and Investment. **AU** Berkovec, James; Fullerton, Don. **AA** Berkovec: University of Virginia. Fullerton: National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 2826; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 10. **PR** \$2.00. **JE** 921, 313, 021. **KW** Portfolio Choice. Housing. Households. Inflation.

**AB** In a mean-variance portfolio choice model, each of 3,578 households from the 1983 Survey of Consumer Finances has calculated preferences over housing, other consumption, and risk. Each household is constrained such that any owner-occupied housing in portfolio must match housing services consumed. Corporate taxes are modeled in some detail, and regression coefficients are used to estimate the adjusted gross income, itemizable deductions, and statutory marginal tax rate of each household. General equilibrium simulation results indicate that inflation does not necessarily increase total owner housing.

### Bernanke, Ben S.

**PD** February 1989. **TI** Unemployment, Inflation, and Wages in the American Depression: Are there Lessons for Europe. **AU** Bernanke, Ben S.; Parkinson, Martin A. **AA** Princeton University. **SR** National Bureau of Economic Research Working Paper: 2862; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 10. **PR** \$2.00. **JE** 042, 122, 153. **KW** Political Economy. Depression. Unemployment. Economic Policy.

**AB** In this paper, we consider whether there are lessons to be drawn from the experience of the American economy during the 1930s for the current European situation. The comparison reveals some important differences: in particular, the persistence of American unemployment in the 1930s reflected to a much greater degree a sequence of large destabilizing shocks, and much less a low-level equilibrium trap, than does modern European unemployment. The self-correcting tendencies of the 1930s U.S. economy were probably much stronger than is generally acknowledged.

### Bertero, Elisabetta

**PD** March 1989. **TI** Structure and Performance: Global Interdependence of Stock Markets around the Crash of October 1987. **AU** Bertero, Elisabetta; Mayer, Colin. **AA** City University Business School, London. **SR** Centre for Economic Policy Research Discussion Paper: 307; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 23. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** 441, 423. **KW** Stock Market Crash. Stock Market. Capital Markets.

**AB** This paper uses a new data source on share prices to examine how stock markets in 23 countries reacted to the crash of October 1987. It records substantial variations across countries. In general there is no evidence that these differences are related to the structure of markets. However, trading halts

and capital controls on residents may have moderated the speed of dealings in some markets. The interrelation between markets is examined before, during and after the crash. The paper reports high correlations between certain groups of countries prior to the crash. However, during the week of the crash the influence of the leading markets became more pronounced.

### Bertocchi, Graziella

**PD** April 1988. **TI** Efficiency and Optimality in Dynamic Models with Stochastic Production. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 88-14; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 26. **PR** No charge. **JE** 111, 023. **KW** Interest Rates. Growth Theory. Stochastic Model. Golden Rule.

**AB** The scope of the present paper is to derive an expression for the "golden rule" interest rate in a stochastic economy with production. In an optimal growth setting, we derive a generalized efficiency condition where capital gains and losses play an explicit role, and reflect interstate variations, besides purely intertemporal ones. Introducing overlapping generations we establish a relationship between production efficiency and consumption optimality: a parameter reflecting the form of the utility function is added into the conditions previously derived, and directly affects "real" variables and the level of the golden rule capital stock.

### Betts, Julian R.

**PD** July 1989. **TI** Technological Change, Sectoral Shifts and the Distribution of Earnings: A Human Capital Model. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 748; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 52. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** 621, 825, 824, 811, 821. **KW** Technological Change. Income Distribution. Sectoral Shifts. Human Capital.

**AB** The paper studies the long run impact of technological change on the labor market in a two sector model with heterogeneous workers. First it is assumed, in line with stylized facts, that inventions increase both productivity and skill requirements. Such skill intensive inventions cause increases in inequality, shifts of labor out of the technologically dynamic sector, and relative price changes. In contrast, a skill neutral invention causes neither changes in inequality nor sectoral shifts, while a skill extensive invention reduces inequality and causes sectoral shifts toward the innovative sector. Only a skill neutral invention leads unequivocally to a Pareto improvement.

### Bevan, David L.

**PD** April 1989. **TI** Fiscal Response to a Temporary Trade Shock: The Aftermath of the Kenyan Coffee Boom. **AU** Bevan, David L.; Collier, Paul; Gunning, Jan W. **AA** Bevan: Unit for the Study of African Economies. Collier: Oxford Institute of Economics and Statistics. Gunning: Free University, Amsterdam. **SR** Oxford Applied Economics Discussion Paper: 68; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. **PG** 34. **PR** no charge. **JE** 321, 322, 121, 226. **KW** Kenya. Coffee. Trade Shocks. Fiscal Policy. Government Spending.

**AB** The appropriate fiscal response to a temporary windfall is difficult to determine even in an unregulated economy: controls, such as those in force during the 1976-79 coffee boom in

Kenya, introduce special problems. For example, foreign exchange control makes the pattern of private investment out of boom income inefficient if nontradable capital goods are inelastically supplied. In Kenya the boom induced a massive increase in public expenditure, far in excess of the increase in public revenue. The net effect on capital formation was negative, because the fiscal response destabilized the path of domestic real investment, reinforcing the rise in the relative price of nontraded capital goods, and because resources were preempted for government consumption.

### Bewley, Truman F.

**PD** April 1989. **TI** Market Innovation and Entrepreneurship: A Knightian View. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 905; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 45. **PR** \$2.00. **JE** 022, 026, 511, 514. **KW** Decision Theory. Uncertainty. Innovation.

**AB** Stimulated by Frank Knight's work, "Risk, Uncertainty and Profit," I present a theory of innovation based on what I term Knightian decision theory. This theory includes a concept of uncertainty aversion, a behavioral property that makes people reluctant to undertake new unevaluable risks. This aversion is compounded when individuals are obliged to cooperate in undertaking risks. The theory leads directly to the conclusion that innovation in business is the natural domain of individual investors with unusually low levels of uncertainty aversion. Also, it should be difficult to innovate new markets for insurance of unevaluable risks, for the success of a new market requires that many people overcome their aversion to uncertainty and enter the market.

### Bhandari, Jagdeep S.

**PD** May 1989. **TI** Exchange Rate Movements and International Interdependence of Stock Markets. **AU** Bhandari, Jagdeep S.; Genberg, Hans. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/89/44; International Monetary Fund, Washington, D.C. 20431. **PG** 40. **PR** no charge. **JE** 441, 431, 411. **KW** Stock Markets. Exchange Rates. Stock Prices.

**AB** This paper investigates linkages between stock markets in seven industrialized countries since 1974. Empirical evidence shows that both nominal and real stock prices (and returns) are strongly positively correlated across countries, and that nominal exchange rate changes do not have systematic effects on nominal stock prices. A two country theoretical model is developed and an attempt is made to reconcile the empirical findings with the properties of this model. Independent evidence on the main source of shocks is used to argue that the time-varying correlation in the data can be reconciled with the predictions of the theory.

### Bhatti, Muhammad I.

**PD** April 1989. **TI** A Beta-Optimal Test of the Equicorrelation Coefficient. **AU** Bhatti, Muhammad I.; King, Maxwell L. **AA** Monash University. **SR** Monash Department of Econometrics Working Paper: 3/89; Department of Econometrics, Monash University, Clayton Victoria 3168, AUSTRALIA. **PG** 15. **PR** no charge. **JE** 211. **KW** Locally Best Test. Power Envelope. Normal Distribution. **AB** This paper considers the problem of testing for nonzero values of the equicorrelation coefficient of a standard

symmetric multivariate normal distribution. Recently, SenGupta (1987) proposed a locally best test. We construct a beta-optimal test and present selected one and five per cent critical values. An empirical power comparison of SenGupta's test with two versions of the beta-optimal test and the power envelope shows the relative strengths of the three tests.

**PD** May 1989. **TI** Null Distribution of the Small Sample Mean Correlation Coefficient: An Application to Medical Research. **AA** Monash University. **SR** Monash Department of Econometrics Working Paper: 4/89; Department of Economics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 8. **PR** no charge. **JE** 211. **KW** Correlation Coefficient. Bessel Function. Characteristic Function. Fubini's Theorem.

**AB** In this note we outlined the procedure to obtain upper tail percentage points of the distribution of the average of  $k$  independent sample correlation coefficient ( $r$ ) each of which is based on  $n$  pairs of observations. Null distribution of  $r$  demonstrates its application to medical research.

#### **Biddle, Jeff E.**

**PD** April 1989. **TI** Choice among Wage-Hours Packages: An Empirical Investigation of Labor Supply. **AU** Biddle, Jeff E.; Zarkin, Gary A. **AA** Biddle: Michigan State University. Zarkin: Research Triangle Institute. **SR** Michigan State Econometrics and Economic Theory Workshop Paper: 8809; Department of Economics, Michigan State University, East Lansing, Michigan 48824. **PG** 46. **PR** no charge. **JE** 821, 824. **KW** Labor Supply. Wage Determination. Employment. Work Hours.

**AB** This paper specifies and estimates an empirical model of male labor supply based on an implicit market model of wage-hours determination. We discuss how moving from a standard labor supply model to an implicit market model affects model specification and choice of estimation technique. We find that average hourly earnings are not independent of hours worked, and that OLS estimates of the wage-hours relationship are biased. We also show that a labor supply model that assumes wages to be independent of hours worked produces a positively biased estimate of the effect of the wage on labor supply.

#### **Blanchflower, D.**

**PD** May 1989. **TI** Fear, Unemployment and Pay Flexibility. **AA** University of Surrey and Centre for Labour Economics. **SR** London School of Economics Centre for Labour Economics Discussion Paper: 344; Centre for Labour Economics, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 28. **PR** no charge. **JE** 824, 821. **KW** Wages. Employment. Labor Market. Wage Determination.

**AB** The paper uses newly available cross section data to study wage determination in Great Britain in the 1980s. It concludes that: 1) fear of unemployment substantially depresses pay; 2) There is some evidence of a wage ratchet whereby rates of pay are more flexible upwards than downwards; 3) The unemployment elasticity of pay averages  $-0.1$ ; 4) wages are almost twice as flexible among the young, the non-union, females, part-timers and those who work in small workplaces. The results are consistent with the popular but untested view that Britain has a secondary labor market in which pay is comparatively flexible and a primary labor market with relatively sticky wages.

#### **Blank, Rebecca**

**PD** March 1989. **TI** Recent Trends in Insured and Uninsured Unemployment: Is there an Explanation? **AU** Blank, Rebecca; Card, David. **AA** Blank: Massachusetts Institute of Technology. Card: Princeton University. **SR** National Bureau of Economic Research Working Paper: 2871; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 43. **PR** \$2.00. **JE** 822, 824, 821. **KW** Unemployment. Unemployment Benefits.

**AB** This paper presents new evidence on the reasons for the recent decline in the fraction of unemployed workers who receive unemployment insurance benefits. Using samples of unemployed workers from the March Current Population Survey, we estimate the fraction of unemployed workers who are potentially eligible for benefits in each year and compare this to the fraction who actually receive unemployment compensation. Perhaps surprisingly, we find that the decline in the fraction of insured unemployment is due to a decline in the takeup rate for benefits. Our estimates indicate that takeup rates declined abruptly between 1980 and 1982, leading to a 6 percentage point decline in the fraction of the unemployed who receive benefits.

#### **Bodie, Zvi**

**PD** June 1989. **TI** Inflation Insurance. **AA** Boston University. **SR** National Bureau of Economic Research Working Paper: 3009; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** \$2.00. **JE** 227, 134, 915. **KW** Inflation. Insurance. Forward Contract. Call Option. CPI.

**AB** A contract to insure \$1 against inflation is equivalent to a European call option on the consumer price index. When there is no deductible this call option is equivalent to a forward contract on the CPI. Its price is the difference between the prices of a zero coupon real bond and a zero coupon nominal bond, both free of default risk. Provided that the risk-free real rate of interest is positive, the price of such an inflation insurance policy first rises and then falls with time to maturity. It is a decreasing function of the real interest rate and an increasing function of both the expected rate of inflation and the real risk premium on nominal bonds. The approach presented in this paper permits fairly precise quantification of the cost of implementing proposals to index pension benefits for inflation. It also gives us a way of estimating the savings to the Social Security system that would result from introducing a deductible.

#### **Bonanno, Giacomo**

**PD** July 1989. **TI** General Equilibrium Theory with Imperfect Competition: A Non-Technical Survey. **AA** University of California at Davis. **SR** University of California at Davis Economics Department Working Paper: 341; Department of Economics, University of California at Davis, Davis, CA 95616. **PG** 59. **PR** no charge. **JE** 021, 022. **KW** General Equilibrium Theory. Imperfect Competition. Conjectural Demand. Nash Equilibrium. Profit Functions.

**AB** This survey is organized as follows: I. Introduction, II. The main issues, III. Negishi's model, IV. Objective demand in the Cournot-Nash framework, V. Objective demand in the Bertrand-Nash framework, VI. The assumption of quasi-concavity of the profit functions, VII. Compromises between

the conjectural and the objective approach, VIII. Insights into the notion of perfect competition, IX. Conclusion.

### Bordo, Michael

**PD** January 1989. **TI** Money Stock Targeting, Base Drift and Price-Level Predictability: Lessons from the U.K. Experience. **AU** Bordo, Michael; Choudhri, Ehsan U.; Schwartz, Anna J. **AA** Bordo: University of South Carolina. Choudhri: Carleton University Schwartz: National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 2825; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$2.00. **JE** 134, 311. **KW** Inflation. Money Demand. England. Monetary Policy.

**AB** It is controversial whether money stock targeting without base drift (i.e. following a trend-stationary growth path) makes the price level more predictable in the presence of permanent shocks to money demand. Developing a procedure that does not run into the Lucas critique, and applying this procedure to the case of the U.K., the paper finds that the variance of the trend inflation rate in the U.K. would have been reduced by more than one half if the Bank of England had not allowed base drift.

### Bradford, David F.

**PD** March 1989. **TI** Market Value vs. Financial Accounting Measures of National Saving. **AA** Princeton University. **SR** John M. Olin Program for the Study of Economic Organization and Public Policy: 34; Department of Economics/Woodrow Wilson School of Public & International Affairs, Princeton University, Princeton, NJ 08544. **PG** 56. **PR** no charge. **JE** 221, 223, 224, 541. **KW** Saving. Wealth. National Income. Accounting. Market Value.

**AB** Although National Income and Product Account (NIPA) saving measures are widely used in both scholarly and journalistic treatments, they are seriously defective as representations of the variables derived from economic analysis. The cost-based value of a restricted class of assets recorded in the national income and product accounts is a version of the financial accounting for the tangible assets of a business firm. Economic analysis calls instead for the current asset market value of business enterprises (and their equivalents) as the measure of wealth, and the annual change in that value as the measure of saving. The picture of recent national saving experience that emerges from market value data is quite different. Various conceptual and data quality issues are discussed.

### Braid, Ralph

**TI** A General Equilibrium Spatial Model of Housing Quality and Quantity. **AU** Arnott, Richard; Braid, Ralph; Davidson, Russell; Pines, David.

### Brams, Steven J.

**PD** April 1989. **TI** Approval Voting in Practice. **AU** Brams, Steven J.; Nagel, Jack H. **AA** Brams: New York University. Nagel: University of Pennsylvania. **SR** New York University Economic Research Reports: 89-07; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 38. **PR** none. **JE** 025. **KW** Social Choice. Elections. Voting.

**AB** Several leading professional associations have recently

decided to use approval voting (AV). The largest of them, the Institute of Electrical and Electronics Engineers (IEEE), with more than 300,000 members, adopted AV in response to severe political conflicts. These involved difficulties with conventional plurality elections of precisely the sort that AV was designed to solve. This paper analyzes results of the first three multi-candidate elections conducted by the IEEE in 1988 using the new system. Issues examined include participation rates, use of multiple votes, patterns of shared support, majority rule, AV-dominance, effects on outcomes, and encouragement of candidate entry. In general, AV appears to have had a successful test in the IEEE.

**PD** April 1989. **TI** Coalition Voting. **AU** Brams, Steven J.; Fishburn, Peter C. **AA** Brams: New York University. Fishburn: AT&T Bell Laboratories. **SR** New York University Economic Research Reports: 89-08; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 35. **PR** none. **JE** 025. **KW** Social Choice. Elections. Voting. Coalition Voting. Political Parties. Multiparty System.

**AB** Coalition voting (CV) is a voting procedure of electing a parliament under a party-list system of proportional representation. As under approval voting (AV), voters can vote for as many parties as they like, but unlike AV, each party does not receive one vote. Instead, each voter has a "party vote", which is divided evenly among all parties of which the voter approves. Theoretical properties of CV are analyzed, and optimal strategies for voters and parties are investigated. Although CV is radically different from AV in the way votes are allocated and aggregated, the physical act of voting for as many alternatives as one likes is the same, commending CV as a relatively simple and practicable reform to promote consensus in party-list systems.

### Branson, William

**PD** March 1989. **TI** Price and Output Adjustment in Japanese Manufacturing. **AU** Branson, William; Marston, Richard C. **AA** Branson: Princeton University. Marston: University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 2878; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** \$2.00. **JE** 631, 431, 514, 511. **KW** Price Adjustment. Prices. Exchange Rates. Exports.

**AB** This paper investigates the importance of markup behavior in Japanese manufacturing. According to the evidence presented Japanese firms have varied the markups of prices over marginal costs in order to limit the effects of exchange rate changes on output. This behavior is quite different from that found in U.S. manufacturing where output and employment have borne the main impact of recent exchange rate changes.

### Brickley, James A.

**PD** July 1988. **TI** The Economic Effects of Franchise Termination Laws. **AU** Brickley, James A.; Dark, Frederick H.; Weisbach, Michael S. **AA** Brickley and Weisbach: University of Rochester. Dark: Iowa State University. **SR** University of Rochester Managerial Economics Research Center Working Paper: 88-11; William E. Simon Graduate School of Business Administration, University of Rochester, NY 14627. **PG** Not available. **PR** no charge. **KW** Franchises. Termination Law. Regulation.

**AB** It is commonly argued that state laws restricting franchise terminations increase the costs of controlling free-rider problems within franchise systems. For industries where individual units are prone to serving transient customers, we estimate that termination laws are associated with a decrease of two to five percent in the fraction of units that are franchised. This result suggests that the termination laws increase the costs of franchising relative to company ownership. Additional analysis indicates that the introduction of the California law was associated with an average share price decline of 6.4 percent for franchise companies operating in the state. This finding is consistent with decreased efficiency, as well as with transfers from franchisors to some existing franchisees which are suggested by the politics around the passage of the laws.

**PD** January 1989. **TI** Capital Formation through Franchising. **AU** Brickley, James A.; Dark, Frederick H.; Weisbach, Michael S. **AA** Brickley and Weisbach: University of Rochester. Dark: Iowa State University. **SR** University of Rochester Managerial Economics Research Center Working Paper: 89-02; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY 14627. **PG** 16. **PR** no charge. **JE** 611, 514, 511. **KW** Capital Formation. Capital Market. Franchises. **AB** Franchising is commonly viewed as a source of expansion capital for small companies with "limited access to capital markets". The fact is that franchising is used by many large, publicly-traded companies. This paper summarizes the agency cost explanation for why firms franchise and provides related empirical tests. In particular, the study extends existing empirical work on the cross-sectional determinants of the own versus franchise decision and provides new time series evidence on the valuation effects of franchise repurchases. The results support the agency explanation for franchising and suggest that there is a cost/benefit trade-off in deciding between owning versus franchising that faces the large as well as the small company.

### Bronars, Stephen G.

**PD** June 1987. **TI** The Effect of Rent Maximizing Unions on Why Workers Join Unions. **AU** Bronars, Stephen G.; Lott, John R. Jr. **AA** Bronars: University of California, Santa Barbara. Lott: Hoover Institute and Montana State University. **SR** Stanford Hoover Institute Working Paper in Economics: E-87-26; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 46. **PR** no charge. **JE** 824, 831. **KW** Union Membership. Unions. Wages. Wage Differential. Labor Demand.

**AB** Recent studies of union wage gains correct for selectivity bias by estimating a union membership probit model. The usual interpretation of this probit model is that it measures the supply response of workers to changes in the union wage differential. This paper challenges this interpretation of union status models for several reasons. First, union status models ignore the fact that rent-seeking prospective members have an incentive to bid up entry costs (through queues) so that higher union wage gains make union jobs more difficult and costly to obtain. Union status models also ignore the impact of labor demand conditions and union objectives on the observed combination of wage gains and membership decisions.

**PD** December 1988. **TI** Union Representation Elections and Firm Profitability. **AU** Bronars, Stephen G.; Deere,

Donald R. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 285; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 31. **PR** no charge. **JE** 831, 522, 521. **KW** Unions. Elections. Profits. Equity.

**AB** Union representation elections are associated with significant declines in firm profitability. In addition to the significant mean affect of union elections on the equity value of firms, there exists substantial variation in the magnitude of equity losses across individual election events. Cross section variation in shareholder equity losses can be explained by the labor intensity of the firm, the size of the union wage premium and fraction of workers organized in the firm's industry, the presence or absence of right-to-work laws in the state where the election is held, the number of workers covered in the representation election, and the number of previous union representation elections in the firm.

**PD** May 1989. **TI** Union Organizing Activity and the Growth of Firms. **AU** Bronars, Stephen G.; Deere, Donald R. **AA** Bronars: University of California, Santa Barbara. Deere: Texas A & M University. **SR** University of California at Santa Barbara Department of Economics Working Paper: 26-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 44. **PR** no charge. **JE** 831, 824, 833, 821. **KW** Unionization. Firm Growth. Unions. Employment.

**AB** This paper analyzes the relationship between changes in unionization at a firm, as measured by union representation elections, and the employment, investment, and output decisions of the firm using a 20-year panel of data. Previous studies of unionization and firm behavior have relied on cross section data, rather than examining the same firm's decisions before and after changes in unionization. As a result, these studies are unable to determine whether or not a statistically significant correlation between unionization and a firm's behavior is indeed causal. Our empirical results suggest that union representation elections reduce the employment and sales growth of firms.

**PD** June 1989. **TI** Union Rent-Sharing and Firm Behavior. **AU** Bronars, Stephen G.; Deere, Donald R. **AA** Bronars: University of California, Santa Barbara. Deere: Texas A & M University. **SR** University of California at Santa Barbara Department of Economics Working Paper: 28-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 29. **PR** no charge. **JE** 831, 833, 521, 522. **KW** Unions. Shareholders. Corporate Debt. Investment.

**AB** There has been much recent evidence that unions and shareholders share rents. This paper develops a dynamic model of rent-sharing between shareholders and a union that implies systematic differences in behavior across union and nonunion firms. If future union members do not fully compensate current agents for union membership, then capital investments that incur current costs but increase future revenues are relatively less attractive to the firm. In general, current union members and shareholders attempt to shift positive cash flows closer to the present and to defer negative cash flows further into the future in order to avoid sharing rents with future union members. Thus a unionized firm invests less than does a comparable nonunion firm.

**Brown, Charles**

**PD** March 1989. **TI** The Employer Size Wage Effect. **AU** Brown, Charles; Medoff, James. **AA** Brown: University of Michigan. Medoff: Harvard University. **SR** National Bureau of Economic Research Working Paper: 2870; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** \$2.00. **JE** 824, 825, 821. **KW** Firm Size. Wages. Productivity. Employment. Labor Demand.

**AB** We consider six explanations for the positive relationship between employer size and wages -- large employers (1) hire higher quality workers; (2) offer inferior working conditions; (3) make more use of high wages to forestall unionization; (4) have more ability to pay high wages; (5) face smaller pools of applicants relative to vacancies; (6) are less able to monitor their workers. We find some support for the first of these, but there remains a significant wage premium for those working for large employers.

**Browning, Martin**

**PD** February 1989. **TI** Testing for the Separability of Commodity Demands from Male and Female Labour Supply. **AU** Browning, Martin; Meghir, Costas. **AA** Browning: McMaster University. Meghir: University College London. **SR** University College London Discussion Paper: 89-05; Department of Economics, University College London, Gower Street, London, WC1E 6BT. **PG** 56. **PR** 2.00 pounds. **JE** 921, 229, 824, 826. **KW** Labor Supply. Leisure. Cost Function. Demand System.

**AB** The issue of whether goods are separable from working behavior is of considerable importance both from a policy point of view as well as for the correct specification of demand systems. We develop a methodology for testing for weak separability using conditional cost functions. The distinguishing characteristic of our approach is that it allows testing for the hypothesis of interest without requiring restrictions of preferences in any other way. Thus preferences within the commodity group of interest can be specified in a general way. While the factors determining participation and hours of work can remain unspecified. In the empirical section of the paper we apply our methodology to a pooled time series of U.K. cross sections.

**Brueckner, Jan K.**

**PD** March 1989. **TI** Tastes, Skills, and Local Public Goods: A Comprehensive Treatment. **AA** University of Illinois. **SR** University of California at Santa Barbara Department of Economics Working Paper: 11-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 22. **PR** no charge. **JE** 022. **KW** Private Goods. Labor Demand.

**AB** This paper provides a general framework for analyzing optimal club configurations in an economy where different types of labor are complementary in the production of private goods, extending the work of Berglas (1976b). The paper shows that when they are optimal, mixed clubs are likely to coexist with homogeneous clubs in a partially mixed configuration. This arrangement, which allows the planner to optimize the population makeup of mixed clubs, was overlooked by Berglas (he assumed that mixed clubs house the entire population). The paper also exposes the critical role of Berglas' assumption that both labor types are essential for production. When this assumption is relaxed, a homogeneous

club configuration may be optimal. This outcome is likely when labor complementarity is weak or when preferences are substantially different.

**Bryant, Ralph C.**

**PD** March 1989. **TI** Domestic and Cross-Border Consequences of U. S. Macroeconomic Policies. **AU** Bryant, Ralph C.; Helliwell, John; Hooper, Peter. **AA** Bryant: Brookings Institution. Helliwell: University of British Columbia and Canadian Department of Finance. Hooper: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 344; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 125. **PR** no charge. **JE** 321, 311, 411, 131. **KW** Fiscal Policy. Tax Policy. Monetary Policy. Macroeconomic Models. Government Spending.

**AB** This paper reviews empirical evidence about the effects of changes in U. S. monetary policy and fiscal policy that has been accumulated during recent years in a series of collaborative research projects involving a variety of global macroeconomic models. The paper also considers, in particular, the consequences over the next five to six years for key U. S. and foreign economic variables of a significant U. S. fiscal contraction. The quantitative implications of both alternative fiscal spending and tax actions, and alternative treatments of expectations (adaptive versus rational) are analyzed.

**Bulow, Jeremy**

**PD** February 1989. **TI** Sovereign Debt Repurchases: No Cure for Overhang. **AU** Bulow, Jeremy; Rogoff, Kenneth. **AA** Bulow: Stanford University. Rogoff: University of Wisconsin. **SR** National Bureau of Economic Research Working Paper: 2850; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** \$2.00. **JE** 443, 322, 321. **KW** Public Debt. Debt Buyback. Investment. Government Spending.

**AB** We show, in a reasonably general model, that if a highly indebted country has good investment projects available to it, then it will not benefit from using any of its resources to buy back debt at market prices. Debt buybacks and debt-equity swaps only make sense for the country if these programs are heavily subsidized by creditors. This result holds for all buyback programs large and small, so long as they involve voluntary creditor participation and are not a larger deal including offsetting concessions from lenders.

**Cadsby, Charles Bram**

**PD** January 1989. **TI** Experimental Tests of Ricardian Equivalence. **AU** Cadsby, Charles Bram; Frank, Murray. **AA** Cadsby: University of Guelph and Queen's University. Frank: University of British Columbia. **SR** Queen's Institute for Economic Research Discussion Paper: 738; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 36. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** 321, 215, 023. **KW** Ricardian Equivalence. Experimental Economics. Fiscal Policy. Bequests. Overlapping Generations.

**AB** The results of a series of experiments testing Ricardian equivalence are reported. The experimental design is based on an overlapping generations model similar to Barro (1974).

Expansionary and contractionary fiscal policies are examined. When theory predicts a positive bequest, decisions close to those predicted by Ricardian equivalence are observed after allowance for learning. In addition, the imposition of a binding nonnegativity constraint on bequests produces the predicted Keynesian behavior. The cost of deviation from the theoretical equilibrium seems to be an important determinant of the variability of the observed decisions around the theoretical equilibrium.

#### Calvo, Guillermo A.

**PD** May 1989. **TI** Indexation and Maturity of Government Bonds: A Simple Model. **AU** Calvo, Guillermo A.; Guidotti, Pablo E. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/89/46; International Monetary Fund, Washington, D.C. 20431. **PG** 33. **PR** no charge. **JE** 322, 321, 134, 227. **KW** Price Index. Government Debt. Inflation. Fiscal Policy.

**AB** The central issue of the paper is the optimality of different degrees of price indexation and maturity structures of government debt when markets are incomplete and policymakers face "credibility" problems. The analysis shows that price indexation is useful because it affects the relevant inflation tax base and allows governments to strike the optimal balance between the gains from conventional tax smoothing and the inflation costs associated with time-consistent policies.

#### Cameron, Trudy Ann

**PD** September 1988. **TI** Empirical Discrete/Continuous Choice Modeling for the Valuation of Non-Market Resources of Public Goods. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 503; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 52. **PR** \$2.50; checks payable to U.C. Regents. **JE** 024, 211. **KW** Public Goods. Survey Methods. Demand Functions. Utility Functions.

**AB** Contingent valuation (CV) survey methods are now being used quite widely to assess the economic value of non-market resources and public goods. However, being "hypothetical responses to hypothetical questions," the implications of these surveys have sometimes met with a degree of skepticism. Here, hypothetical CV data are combined with "travel cost" data on actual market behavior (exhibited by the same consumers) to "auto-validate" the implied CV demand functions.

#### Canova, Fabio

**PD** September 1987. **TI** Forecasting Seasonal Series with Bayesian Methods. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 87-16; Department of Economics, Brown University, Providence, RI 02912. **PG** 26. **PR** No charge. **JE** 132, 133. **KW** Bayesian Model. ARMA Models. Seasonality. Forecasting. Time Series Theory.

**AB** Two univariate Bayesian models which include in the prior uncertain linear restrictions describing the structure of the components of the time series are constructed. Their forecasting performances are compared with unrestricted AR and multiplicative ARIMA models. Also, a multivariate Bayesian specification is compared with a model where seasonality is restricted to be independent of the nonseasonal component of the series. Univariate Bayesian methods improve

on average over ARIMA specifications. In multivariate models the gains are significant.

**PD** August 1988. **TI** On Time-Series Properties of Time-Varying Risk Premium in the Yen/Dollar Exchange Market. **AU** Canova, Fabio; Ito, Takatoshi. **AA** Canova: Brown University. Ito: Hitotsubashi University. **SR** National Bureau of Economic Research Working Paper: 2678; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** \$2.00. **JE** 441, 411. **KW** Risk Premium. VAR. Vector Autoregression. Exchange Market. Foreign Exchange.

**AB** The purpose of this paper is to characterize the changes in risk premium in the 1980s. A five-variable vector autoregressive model (VAR) is constructed to calculate a risk premium series in the foreign exchange market. The risk premium series is volatile and time-varying. The hypothesis of no risk premium is strongly rejected for the entire sample and each of the two subsamples considered. Various tests using the constructed risk premium series suggest that a risk premium existed but it was neither constant nor stable over subsamples and that its volatility was considerably reduced after October 1982.

**PD** September 1988. **TI** Price Smoothing Policies: A Welfare Analysis. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 88-10; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 31. **PR** No charge. **JE** 131, 133, 134, 311, 023. **KW** Monetary Policy. Seasonality. Fluctuations. Seasonal Cycle. Monetary Model.

**AB** During much of the post WWII experience in the U.S., monetary policy has been conducted in such a way as to eliminate seasonal fluctuations in prices and nominal interest rates. Developments in financial markets and recently discovered empirical regularities regarding the seasonal cycle seems to make these seasonal activities questionable. The paper analyzes in the framework of general equilibrium monetary models the conditions under which seasonal price movements will appear, the welfare properties of open market price stabilizing policies, the sense in which the distinction between seasonal and cyclical fluctuations is relevant and the robustness of the results to alternative ways of introducing money in the model. It is shown that the results depend on the assumption that agents are homogeneous and on the origin of the shock but not on the length of the cycle of fluctuation.

#### Cantor, Richard

**PD** April 1989. **TI** Price Limits and Volatility in Soybean Meal Future Markets. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 8904; 33 Liberty St., Rm. 905, New York, NY 10045. **PG** 26. **PR** no charge. **JE** 313. **KW** Futures Markets. Volatility. Stock Market. Asset Prices.

**AB** Exchange-imposed limits on daily price changes reduce measured price volatility in a trivial way by increasing the period over which large shocks to fundamentals become reflected in prices. But proponents argue further that limits reduce excess volatility by preventing the "overreaction" of prices to "news". Opponents argue that limits may increase excess volatility by converting small shocks into limit price changes through a "magnet" effect. This paper analyzes these conflicting claims by examining daily closing prices for October soybean meal futures contracts between 1976 and 1988

for both the U.S. market, which has limit prices, and the U.K. market, which has no limits.

**Card, David**

**TI** Recent Trends in Insured and Uninsured Unemployment: Is there an Explanation? **AU** Blank, Rebecca; Card, David.

**PD** May 1989. **TI** The Impact of the Mariel Boatlift on the Miami Labor Market. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 253; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 43. **PR** \$1.50. **JE** 824, 823, 821. **KW** Immigration. Labor Market. Wages. Employment. Labor Supply.

**AB** This paper presents an empirical analysis of the impact of the Mariel Boatlift on the Miami labor market, focusing on the effects on wages and unemployment rates of less-skilled workers. The Mariel immigrants increased the population and labor force of the Miami metropolitan area by 6-7 percent. Most of the immigrants were relatively unskilled: as a result, the proportional increase in labor supply to less-skilled occupations and industries was probably much greater. Nevertheless, an analysis of wages of non-Cuban workers in Miami over the 1979-85 period reveals virtually no effect of the Mariel influx. Likewise, there is no indication that the Boatlift lead to an increase in the unemployment rates of less-skilled blacks or other non-Cuban workers.

**Carson, Richard T.**

**PD** May 1989. **TI** A Discrete Choice Contingent Valuation Estimate of the Value of Kenai King Salmon. **AU** Carson, Richard T.; Hanemann, Michael; Steinberg, Dan. **AA** Carson: University of California, San Diego. Hanemann: University of California, Berkeley. Steinberg: San Diego State University. **SR** University of California at San Diego Department of Economics Discussion Paper: 89-21; Department of Economics, D-008, UCSD, La Jolla CA 92093. **PG** 22. **PR** \$3.00. **JE** 722, 721. **KW** Discrete Choice. Contingent Valuation. Fishing. Salmon. Demand Curve.

**AB** A new method for estimating the demand curve for publicly supplied goods when quantities are restricted to a few discrete levels is introduced. The method involves fitting a conditional logit model to choices from a set of survey options in which price and quantity are both varied and consumer attitudes are explicitly controlled for. The estimate parameters of the valuation function serve to trace out the marginal value of the good at each level of hypothetical consumption in survey data. We apply the method to the valuation of salmon on Alaska's Kenai river. We find that there is a distinct kink in the marginal valuation function and that sport fishermen may place a negative marginal value on fish permits exceeding their desired catch levels.

**Cave, Jonathan A. K.**

**PD** October 1988. **TI** Age, Time, and the Measurement of Mortality Benefits. **AA** Rand Corporation. **SR** Rand Report: R-3557; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. **PG** 58. **PR** no charge. **JE** 913, 921, 024. **KW** Mortality. Health Care.

**AB** Several analytical procedures can be used to place dollar values on the benefits of policies that reduce mortality. This report examines the sensitivity of such measures to age, time, and information effects. It derives benefits measures from a formal model of individual lifetime consumption decisions and

applies them to several cases of policy interest. The author derives a number of policy recommendations from the research.

**Champ, Bruce**

**PD** October 1988. **TI** Money, Output, and the Nominal National Debt. **AU** Champ, Bruce; Freeman, Scott. **AA** Champ: University of Iowa. Freeman: University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 9-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 25. **PR** no charge. **JE** 021, 022. **KW** Money Stock. Monetary Shocks. General Equilibrium. Inflation.

**AB** This paper presents an explicit general equilibrium model of utility maximizing rational agents in which unanticipated innovations in the stock of fiat money affect real variables. In this model, an unanticipated inflation reduces the real value of the national debt, which is perceived as net wealth by the finitely lived agents of the model. Young agents respond to such an event by increasing investment, which leads to an increase in real output and wages in the following period. In contrast with price-surprise models which assume that agents lack information on the current money stock and price level, these real effects occur even if the monetary innovation is instantly and perfectly known by agents. This paper also establishes that stochastic monetary policies can function as a type of intergenerational insurance that can guard against adverse shocks to the real environment.

**Chari, V. V.**

**PD** August 1988. **TI** Time Consistency and Policy. **AU** Chari, V. V.; Kehoe, Patrick J.; Prescott, Edward C. **AA** Chari: Federal Reserve Bank of Minneapolis. Kehoe and Prescott: Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 115; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55480. **PG** 61. **PR** no charge. **JE** 113, 323, 322, 022. **KW** Time Consistent Policy. Economic Policy. Government Debt. Taxation.

**AB** In this paper we review the implications of the time consistency requirement for economic policy. Allocations and policies are defined as functions of the history of past policies. A sequence of history contingent allocation and policy functions is sustainable if it satisfies certain sequential rationality conditions. We illustrate these ideas in a capital taxation model and in a model of default on government debt.

**PD** January 1989. **TI** Labor Contracts in a Model of Imperfect Competition. **AU** Chari, V. V.; Jones, Larry E.; Manuelli, Rodolfo E. **AA** Chari: Federal Reserve Bank of Minneapolis and University of Minnesota. Jones: Northwestern University. Manuelli: Stanford University. **SR** Federal Reserve Bank of Minneapolis Staff Report: 117; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55480. **PG** 13. **PR** no charge. **JE** 824, 833, 821. **KW** Implicit Contracts. Monopoly Power. Involuntary Unemployment.

**AB** We propose a definition of involuntary unemployment which differs from that traditionally used in implicit labor contract theory. We say that a worker is involuntarily unemployed if the marginal wage implied by the optimal contract exceeds the marginal rate of substitution between leisure and consumption. We construct a model where risk-

neutral firms have monopoly power and show that such monopoly power is necessary for involuntary unemployment to arise in the optimal contract. We numerically compute examples and show that such unemployment occurs for a wide range of parameter values.

**PD** May 1989. **TI** International Coordination of Fiscal Policy in Limiting Economies. **AU** Chari, V. V.; Kehoe, Patrick J. **AA** Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 121; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55480. **PG** 29. **PR** no charge. **JE** 411, 422, 322, 321. **KW** Fiscal Policy. Tariffs. Policy Coordination. Market Power.

**AB** We examine the limiting behavior of cooperative and noncooperative fiscal policies as countries' market power goes to zero. We show that these policies converge if countries raise revenues through lump-sum taxation. However, if there are unremovable domestic distortions, such as distorting taxes, there can be gains to coordination even when a single country's policy cannot affect world prices. These results differ from the received wisdom in the optimal tariff literature. The key distinction is that, unlike in the tariff literature, the spending decisions of governments are explicitly modeled.

**PD** June 1989. **TI** Sustainable Plans. **AU** Chari, V. V.; Kehoe, Patrick J. **AA** Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 122; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55480. **PG** 43. **PR** no charge. **JE** 113, 323, 321, 021, 026. **KW** Sequential Rationality. Capital Taxation. Repeated Games. Economic Policy.

**AB** We propose a definition of time consistent policy for infinite horizon economies with competitive private agents. Allocations and policies are defined as functions of the history of past policies. A sustainable equilibrium is a sequence of history-contingent policies and allocations that satisfy certain sequential rationality conditions for the government and for private agents. We provide a complete characterization of the sustainable equilibrium outcomes for a variant of Fischer's (1980) model of capital taxation. We also relate our work to recent developments in the theory of repeated games.

### **Chew, S. H.**

**PD** August 1988. **TI** Mixture Symmetric Utility Theory. **AU** Chew, S. H.; Epstein, Larry G.; Segal, Uzi. **AA** Johns Hopkins University. Epstein and Segal: University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8812; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 40. **PR** Gratis (if in stock). **JE** 022, 026. **KW** Nonexpected Utility. Probability Mixtures. Quadratic Utility. Utility Functions.

**AB** The independence axiom of expected utility theory has recently been weakened to the betweenness axiom. In this paper an even weaker axiom, called mixture symmetry, is presented. The axiom requires indifference between symmetric probability mixtures of indifferent alternatives. The corresponding functional structure is such that utility is a betweenness functional on part of its domain and quadratic in probabilities elsewhere. The experimental evidence against betweenness provides one motivation for the more general

theory presented here. Another advantage of the mixture symmetric class of utility functions is that it is sufficiently flexible to permit the disentangling of attitudes towards risk and towards randomization.

### **Chin, Judith C.**

**PD** November 1988. **TI** Intellectual Property Rights and North-South Trade. **AU** Chin, Judith C.; Grossman, Gene M. **AA** Princeton University. **SR** Princeton Woodrow Wilson School Discussion Paper in Economics: 143; Woodrow Wilson School, Princeton University, Princeton, NJ 08544. **PG** 32. **PR** no charge. **JE** 421, 621, 411. **KW** Patents. Knowledge. Technology.

**AB** We conduct our analysis in the context of a competition between a single Northern producer and a single Southern producer selling some good to an integrated world market. In this competition, only the Northern firm has the ability to conduct R&D in order to lower its production costs, but the Southern firm can imitate costlessly if patent protection for process innovations is not enforced by the government of the South. We find that the interests of the North and the South generally conflict in the matter of protection of intellectual property, with the South benefiting from the ability to pirate technology and the North harmed by such actions. A strong system of intellectual property rights may or may not enhance world efficiency.

### **Cho, Jang Oh**

**PD** June 1988. **TI** Employment and Hours over the Business Cycle. **AU** Cho, Jang Oh; Cooley, Thomas F. **AA** University of Rochester. **SR** University of Rochester Bradley Policy Research Center Working Paper: 88-03; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester NY, 14627. **PG** Not available. **PR** No charge. **JE** 133, 131, 821, 023. **KW** Business Cycles. Employment. Hours. Labor Force.

**AB** Approximately one quarter of the adjustment in total hours of employment over the business cycle represents adjustments in hours while the remainder is explained by changes in employment. Real Business Cycle theories based on representative agent models have abstracted from these facts by characterizing agents as either continuously adjusting their hours or making only labor force participation decisions about jobs with indivisible hours. In this paper we extend the representative agent framework in a way that is more in the spirit of the modern labor supply literature; workers decide on both participation and hours.

### **Choudhri, Ehsan U.**

**TI** Money Stock Targeting, Base Drift and Price-Level Predictability: Lessons from the U.K. Experience. **AU** Bordo, Michael; Choudhri, Ehsan U.; Schwartz, Anna J.

### **Coate, Stephen**

**PD** June 1988. **TI** Public Utility Pricing and Capacity Choice under Risk: A Rational Expectations Approach. **AU** Coate, Stephen; Panzer, John C. **AA** Coate: Harvard University. Panzer: Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 780; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 22. **PR** no charge. **JE** 613, 026, 614, 022.

**KW** Public Utilities. Public Enterprises. Utility Pricing. Utility Demand.

**AB** Over the last two decades there has developed an extensive literature on the theory of public enterprise pricing and capacity choice under uncertainty. An issue that has been largely ignored however is the effect that consumers' probability of being rationed (system reliability) has on their demand for the service. In this paper we develop a model that reflects the intuitive notion that a more reliable service is a higher quality service, so that an increase in system reliability shifts consumer's demand curves outward. We then incorporate this effect into our analysis of the utility's optimal pricing and investment rules.

### Cohen, Daniel

**PD** April 1989. **TI** The European Monetary Union: An Agnostic Evaluation. **AU** Cohen, Daniel; Wyplosz, Charles. **AA** Cohen: CEPREMAP, Paris. Wyplosz: INSEAD, Fontainebleau. **SR** Centre for Economic Policy Research Discussion Paper: 306; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 40. **PR** \$4.00. **JE** 431, 432, 423, 113. **KW** Monetary Integration. European Monetary System. Seigniorage. Policy Coordination.

**AB** The debate about a European Monetary Union (EMU) revolves mainly about two issues: the costs of the loss of a national policy instrument, in the form of stabilization and revenues of seigniorage, and the gains from policy coordination. We argue that the costs of giving up national seigniorage are small, but that, on the other hand, policy coordination is not optimally achieved through monetary integration, owing to trade balance externalities. Yet, the EMU should not be compared with an infeasible first-best scheme, but with its alternative, the EMS.

**PD** April 1989. **TI** Debt Relief and Secondary Market Discount. **AA** CEPREMAP, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 312; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 19. **PR** \$4.00. **JE** 433, 432, 443. **KW** Secondary Market. Buy-backs. Developing Countries. Debt.

**AB** This paper analyzes the inefficiency that arises from a debt overhang. In order to define the lenders' optimal rescheduling strategy, I calculate the maximum present discounted value of the repayment they could obtain. This upper bound occurs when the borrower gives up sovereignty over all decisions except to default. To secure the maximum, however, the lenders do not simply extract a payment equal to the cost of default, but allows the country to invest more. The maximum present discounted value return coincides with the equilibrium market value of the debt. Rather than a debt write-off, the key to an efficient rescheduling process is a clear commitment from the lenders that the flow of resources they will ask the debtor to transfer will reflect the secondary market discount.

### Collier, Paul

**TI** Fiscal Response to a Temporary Trade Shock: The Aftermath of the Kenyan Coffee Boom. **AU** Bevan, David L.; Collier, Paul; Gunning, Jan W.

### Collins, Susan

**PD** May 1988. **TI** South Korea's Experience with

External Debt. **AA** Harvard University. **SR** National Bureau of Economic Research Working Paper: 2598; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** \$2.00. **JE** 131, 443, 121, 133, 113. **KW** South Korea. External Debt. Economic Policy. Economic Fluctuations.

**AB** This paper examines South Korea's macroeconomic performance and experience with external debt during 1960-1986. Most of Korea's debt was accumulated during three periods: 1966-69, 1974-75 and 1979-81. Each involved an initial phase of economic difficulty and a slow down in growth, followed by an impressive recovery. The paper reviews the economic and political developments during each cycle in some detail. Of particular interest are the shifts in economic policy as domestic authorities responded to external and internal developments. The paper is part of a larger study of the Korean experience.

### Cooley, Thomas F.

**TI** Employment and Hours over the Business Cycle. **AU** Cho, Jang Oh; Cooley, Thomas F.

**PD** August 1988. **TI** Asymptotic Likelihood Based Prediction Functions. **AU** Cooley, Thomas F.; Parke, William R. **AA** Cooley: University of Rochester. Parke: University of North Carolina, Chapel Hill. **SR** University of Rochester Center for Economic Research Working Paper: 151; Department of Economics, University of Rochester, Rochester, NY 14627. **PG** 32. **PR** no charge. **JE** 211, 132. **KW** Prediction Efficiency. Asymptotic Properties. Predictions. Forecasting.

**AB** This paper develops asymptotic prediction functions that approximate the shape of the density of future observations and correct for parameter uncertainty. The functions are based on extensions to a definition of predictive likelihood originally suggested by Lauritzen and Hinkley. The prediction function is shown to possess efficiency properties based on the Kullback-Liebler measure of information loss. Examples of the application of the prediction function and the derivation of relative efficiency are shown for linear-normal models, non-normal models and ARCH models.

**PD** August 1988. **TI** The Inflation Tax in a Real Business Cycle Model. **AU** Cooley, Thomas F.; Hansen, Gary D. **AA** Cooley: University of Rochester. Hansen: University of California, Los Angeles. **SR** University of Rochester Center for Economic Research Working Paper: 155; Department of Economics, University of Rochester, Rochester, NY 14627. **PG** 32. **PR** no charge. **JE** 133, 132, 111, 023. **KW** Inflation Tax. Business Cycles. Growth Model. Inflation.

**AB** This paper develops a model of a competitive economy that incorporates the major features of real business cycle models but includes money. The model is a one sector stochastic optimal growth model with indivisible labor and employment lotteries. Money is introduced via a cash-in-advance constraint for the consumption good. The model is calibrated and simulated to measure the welfare cost of the inflation tax and to determine how the cyclical and steady state properties of the model are affected by inflation.

### Cotter, Kevin D.

**PD** July 1988. **TI** Similarity of Correlated Equilibria. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science

Working Paper: 781; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. PG 21. PR no charge. JE 026. KW Correlated Equilibrium. Normal Games. Game Theory. Uncertainty.

AB A definition of correlated equilibrium for normal form games with general uncertainty is provided and its technical properties are studied.

PD July 1989. TI Correlated Equilibria with Payoff Uncertainty. AA Northwestern University. SR Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 840; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. PG 23. PR no charge. JE 026. KW Game Theory. Bayesian Games. Correlated Equilibrium. Payoff Uncertainty.

AB Aumann's notion of correlated equilibrium is extended to games with payoff uncertainty. In this paper, an action correlated equilibrium is defined to be a probability distribution over types and actions which is consistent with the prior distribution over types and is self-fulfilling when each player observes its type and action from the distribution. This definition is broader, and mathematically simpler, than the one previously studied by the author, which was a correlated equilibrium for the ex ante game in behavioral strategies. The action correlated equilibrium correspondence is shown to be continuous with respect to the prior distribution of types, proving existence.

### Courakis, Anthony S.

PD December 1988. TI Anticipated Inflation and Portfolio Selection. AA Brasenose College and Institute of Economics and Statistics, Oxford. SR Oxford Applied Economics Discussion Paper: 65; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. PG 29. PR no charge. JE 134, 313, 311. KW Inflation. Portfolios. Indexation. Expectations. Money Demand.

AB This paper examines the effects of anticipated inflation on asset demands under alternative assumptions regarding a) preferences between risk and return, and b) perceptions of responses of nominal returns to the anticipated rate of inflation.

### Cowan, Robin

PD September 1989. TI Technological Variety and Competition: Issues of Diffusion and Intervention. AA New York University. SR New York University Economic Research Reports: 89-23; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 28. PR none. JE 621, 612, 611. KW Technology. Technology Adoption. Market Intervention.

AB Recent work in the area of competing technologies has stressed the result that when several technologies compete for the same niche in the market, under a wide variety of circumstances, all but one of the technologies will be driven from the marketplace. Further, it need not be the best technology which remains. This paper argues that there is a place for intervention when technologies are being chosen or standards are being set. Intervention in the market can optimally balance the tradeoff between the desire for immediate payoffs and the desire for more information about different technologies--it can raise the expected present value of the

adoption process. It remains the case, however, that even with optimal intervention, the market will lock into a single technology, and not necessarily the superior one. The paper discusses these results with reference to technological changes in high tech and information technology.

### Cunningham, Thomas J.

PD May 1989. TI Money and Interest Rates: The Effects of Temporal Aggregation and Data Revisions. AU Cunningham, Thomas J.; Hardouvelis, Gikas A. AA Federal Reserve Bank of New York. SR Federal Reserve Bank of New York Research Paper: 8908; 33 Liberty St., Rm. 905, New York, NY 10045. PG 21. PR no charge. JE 311, 132. KW Money. Interest Rates. Liquidity Effect. Aggregation.

AB Econometric estimates of liquidity effects produce results that are, at best, mixed. Yet the liquidity effect remains a central transmission mechanism for monetary effects. This paper examines how problems of data revisions and temporal aggregation affect the empirical effort. We test for liquidity effects using both initially announced and finally revised M1 data, aggregating across different time intervals and time periods, using different aggregation techniques. We were able to uncover a liquidity effect only in the post-October 1979 period and only at a thirteen week observational interval with non-aggregated end-of-period M1 data.

### Currie, Janet M.

PD May 1989. TI Wages and Arbitrator Behavior. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 562; Department of Economics - UCLA, Los Angeles, CA 90024. PG 30. PR \$2.50. JE 832, 215. KW Collective Bargaining. Public Sector. Wages. Arbitration. AB In recent years various types of arbitration systems have been adopted to replace more costly methods for settling disputes in labor agreements, commercial contracts and in the courtroom. This paper reports the first systematic experimental comparison of the effect of the alternative arbitration systems on dispute rates. Every arbitration hearing involves three parties. We simplify this three party bargaining problem by modeling arbitration decisions as random draws from a fixed distribution. The resulting two party bargaining problem is easily implemented in the laboratory.

PD May 1989. TI An Experimental Comparison of Alternative Arbitration Systems. AU Currie, Janet M.; Ashenfelter, Orley; Spiegel, Matthew. AA Currie: University of California, Los Angeles. Ashenfelter: Princeton University. Spiegel: Columbia University. SR University of California at Los Angeles Department of Economics Working Paper: 563; Department of Economics - UCLA, Los Angeles, CA 90024. PG 40. PR \$2.50. JE 832. KW Arbitration. Bargaining. Negotiations. Settlements.

AB The basic assumption of the model of arbitrator behavior developed in this paper is that arbitrators weight the information they receive in exactly the same way as it has been weighted in recent negotiated settlements. The model is tested using a sample of 1650 contracts covering public school teachers in the Canadian province of British Columbia over the period 1960 to 1981. All of its predictions are supported by these data.

**Daley, Tad**

**TI** Military Dimensions of Communist Systems.  
**AU** Zycher, Benjamin; Daley, Tad.

**Dark, Frederick H.**

**TI** The Economic Effects of Franchise Termination Laws.  
**AU** Brickley, James A.; Dark, Frederick H.; Weisbach, Michael S.

**TI** Capital Formation through Franchising. **AU** Brickley, James A.; Dark, Frederick H.; Weisbach, Michael S.

**Davidson, Russell**

**TI** A General Equilibrium Spatial Model of Housing Quality and Quantity. **AU** Arnott, Richard; Braid, Ralph; Davidson, Russell; Pines, David.

**Davis, Steve J.**

**TI** Altruism, Borrowing Constraints, and Social Security.  
**AU** Altig, David; Davis, Steve J.

**Davuityon, Nurhan**

**PD** February 1989. **TI** Testing Purchasing Power Parity.  
**AU** Davuityon, Nurhan; Pippengor, John. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 19-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 30. **PR** no charge. **JE** 431, 411. **KW** Purchasing Power Parity. Transaction Costs. Exchange Rates.

**AB** Empirical tests of purchasing power parity often recognize the problems created by simultaneous equations, see for example Frenkel (1981), but almost never recognize the effects of transaction costs. We present evidence that transaction costs create serious econometric problems for testing purchasing power parity and construct a model of the determination of exchange rates that illustrates how transaction costs lead to regression switching.

**Day, Richard H.**

**PD** May 1989. **TI** Dynamical Systems, Adaptation and Economic Evolution. **AA** University of Southern California. **SR** University of Southern California Modelling Research Group Working Paper: M8908; Department of Economics, University of Southern California, University Park, Los Angeles, CA 90089-0152. **PG** 30. **PR** no charge. **JE** 111, 112, 023, 022, 131. **KW** Adaptation. Evolution. Dynamic Systems. Economic Development. Growth Model.

**AB** Dynamical systems theory and developments in physics, biology and economics are leading to a new adaptive, evolutionary perspective on how physical processes, living systems and human societies work. Recent economic developments in this direction have built on a rich intellectual tradition going back to the classical period. They can now exploit the new ideas in mathematical dynamics to investigate more realistic models of individual adjustment, social interaction and changing organizational structure. Some of the possibilities are illustrated here using an augmented classical macro growth model. In this model economic development occurs through a multiple phase process of growth, nonperiodic fluctuations and switching techno infrastructures. The paper then shifts from a macro to a micro perspective.

**TI** Real Growth Cycle with Adaptive Expectations.

**AU** Lin, Tzong Yau; Tse, Wai Man; Day, Richard H.

**de Bartolome, Charles A. M.**

**PD** April 1989. **TI** Low Income Housing Assistance: The Effects of Community Composition on Public Expenditures and Welfare. **AA** New York University. **SR** New York University Economic Research Reports: 89-06; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 20. **PR** none. **JE** 931, 932, 324, 941. **KW** Property Tax. Community. Public Service. Housing.

**AB** The local public service level is financed by a property tax and set by majority voting. The in-migration of low income families into a community causes a fiscal deterioration. I consider the effect of the fiscal deterioration on welfare, on the public service level and on house prices. In particular, I show that the fiscal deterioration may be beneficial for high income residents, or may cause the public service level to rise. Both cases cannot simultaneously occur.

**PD** August 1989. **TI** Interpreting "The Ramsey Equations" of Optimal Tax Theory. **AA** New York University. **SR** New York University Economic Research Reports: 89-21; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 21. **PR** none. **JE** 022, 921. **KW** Indirect Taxes. Taxes. Taxation.

**AB** "The Ramsey Equations," which characterize the optimum indirect tax structure, are interpreted using the intuitive ideas of excess burden and willingness to pay.

**de Grauwe, Paul**

**PD** March 1989. **TI** Is the European Monetary System a DM-Zone?. **AA** University of Leuven. **SR** Centre for Economic Policy Research Discussion Paper: 297; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 28. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** 431, 432, 441, 423. **KW** European Monetary System. Exchange Rates. Speculation. Interest Rates.

**AB** In this paper we analyze issues of symmetry and asymmetry in the workings of the EMS. We first measure how interest rates react to speculative disturbances. We find that despite the fact that speculative shocks have usually forced the offshore interest rates of the weak currencies to increase by the full amount of the expected realignments, these countries managed (almost) completely to insulate their domestic interest rates from speculative crises. They achieved this by capital controls and other instruments of market segmentation. Second, using Granger causality tests, we find that the interdependence of interest rates is more symmetric than is usually assumed, involving, for example, an important two-way interdependence between Germany and France.

**De Long, J. Bradford**

**PD** March 1989. **TI** The Size and Incidence of the Losses from Noise Trading. **AU** De Long, J. Bradford; Shleifer, Andrei; Summers, Lawrence; Waldmann, Robert. **AA** De Long, Summers, and Waldmann: Harvard University. Shleifer: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 2875; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** \$2.00. **JE** 313, 311, 024. **KW** Asset Prices. Stock Prices. Welfare Theory. Trading.

**AB** Recent empirical research has identified a significant amount of volatility in stock prices that cannot be easily explained by changes in fundamentals; one interpretation is that asset prices respond not only to news but also to irrational "noise trading". We assess the welfare effects and incidence of such noise trading using an overlapping generations model that gives investors short horizons. We find that the additional risk generated by noise trading can reduce the capital stock and consumption of the economy, and we show that part of that cost may be borne by rational investors. We conclude that the welfare costs of noise trading may be large if the magnitude of noise in aggregate stock prices is as large as suggested by some of the recent empirical literature on the excess volatility of the market.

### de Palma, Andre

**TI** Information and Time-of-Use Decisions in Stochastically Congestible Facilities. **AU** Arnott, Richard; de Palma, Andre; Lindsey, Robin.

### Deacon, Robert

**PD** March 1989. **TI** Price Controls and Rent Dissipation with Endogenous Transactions Costs. **AU** Deacon, Robert; Sonstelie, Jon. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 15-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 32. **PR** no charge. **JE** 021, 022. **KW** Price Ceiling. Transaction Costs. Rents.

**AB** A price ceiling, with first come/first served allocation of the available supply, results in rationing by waiting for the price-controlled good. Waiting represents a form of competition that tends to dissipate the rent created by the control. Consumers may also find other ways to compete, such as buying more per purchase or hiring others to wait in line. Although individually rational, competition on these additional margins causes social losses beyond those due to waiting. Such competition can also alter the nature of equilibrium in the market for the price-controlled good. A market that exhibits a unique interior equilibrium in the absence of a price ceiling may have multiple equilibria, or no interior equilibrium, when a price control is imposed and competition for the resulting rent emerges.

### Deere, Donald R.

**TI** Union Representation Elections and Firm Profitability. **AU** Bronars, Stephen G.; Deere, Donald R.

**PD** December 1988. **TI** Plant Closings, Advance Notice, and Private Contractual Failure. **AU** Deere, Donald R.; Wiggins, Steven N. **AA** Deere: University of California, Santa Barbara. Wiggins: Texas A&M University. **SR** University of California at Santa Barbara Department of Economics Working Paper: 286; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 44. **PR** no charge. **JE** 824, 514, 511, 821. **KW** Employment. Shutdown. Private Contracts. Labor Force.

**AB** This paper addresses the question of when advance notice to workers of a plant closing is efficient and whether or not market forces will guarantee its provision. We show that some notice is generally efficient, but that in many cases it will not be provided because of a private contracting failure. There is often no credible, private mechanism for enforcing a promise to give advance notice. The paper then presents empirical

evidence that contractual failures are a statistically and economically important factor determining the amount of notice workers receive.

**TI** Union Organizing Activity and the Growth of Firms. **AU** Bronars, Stephen G.; Deere, Donald R.

**PD** June 1989. **TI** Unemployment Insurance and Employment. **AA** Texas A & M University. **SR** University of California at Santa Barbara Department of Economics Working Paper: 27-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 21. **PR** no charge. **JE** 822, 824, 813, 821. **KW** Unemployment Insurance. Employment. Labor Demand. **AB** This paper examines the impact of UI on the allocation of labor resources across industries. An overlooked aspect of unemployment insurance is the effect of imperfect experience rating on the hiring of a worker. Firms in more stable industries will likely pay more into the UI system than their workers will ever receive in benefits. This generates a subsidy from more stable to more volatile industries, thus resulting in a reallocation of labor resources. The results indicate that industry employment levels are significantly affected by UI and that there is a sizable net shift of resources from the Wholesale/Retail Trade and Service industries to the Construction industry.

**TI** Union Rent-Sharing and Firm Behavior. **AU** Bronars, Stephen G.; Deere, Donald R.

### Dellas, Harris

**PD** July 1989. **TI** Growth Via External Public Debt and Capital Controls. **AU** Dellas, Harris; Galor, Oded. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 89-21; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 20. **PR** No charge. **JE** 111, 411. **KW** Open Economy. Economic Growth. Growth Model. Capital Controls. Foreign Debt.

**AB** This paper analyzes strategies for economic growth of a small open overlapping generations economy which is characterized by multiple, dynamically efficient, locally stable, stationary equilibria. The paper designs a Pareto welfare improving growth scheme that consists of public external debt and controls on private capital outflows. This policy permits the economy to move from a low output to a high output stationary equilibrium. The policy may be Pareto welfare improving if the economy's rate of convergence to the better stationary equilibrium is faster than the rate of accumulation of the foreign public debt. The results may provide an explanation for the widespread use of public foreign debt and capital controls.

### Deneckere, Raymond

**TI** Efficient Sequential Bargaining. **AU** Ausubel, Lawrence; Deneckere, Raymond.

### Dertouzos, James N.

**PD** 1988. **TI** The Legal and Economic Consequences of Wrongful Termination. **AU** Dertouzos, James N.; Holland, Elaine; Ebener, Patricia. **AA** Rand Corporation. **SR** Rand Report: R-3602; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. **PG** 73. **PR** no charge. **JE** 916, 024. **KW** Litigation. Law. Job Loss. Employment.

**AB** Although there has been an uproar over wrongful termination litigation, the direct costs may understate the effects of these suits. The fear of such suits could prevent managers from being flexible in adjusting to business cycles, new investment opportunities, or evolving technologies. In response to wrongful termination suits, administrative costs may rise substantially. Costly procedural changes could be balanced by benefits stemming from more efficient utilization of human resources, making everyone better off.

### Devereux, Michael B.

**PD** June 1989. **TI** Government Purchases and Real Interest Rates with Endogenous Time Preference. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 749; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 15. **PR** \$3.00 Canada; \$3.50 U.S. and Foreign. **JE** 322, 226, 111, 132. **KW** Government Spending. Interest Rates. Time Preference. Growth Model.

**AB** This note shows that the observation of low real interest rates during periods of high temporary government purchases, such as wars, can be reconciled with the neoclassical growth model extended to allow for endogenous time preference. Temporary increases in government purchases lead to a fall in the instantaneous rate of time preference. This may result in rising investment and falling real interest rates along an adjustment path.

### Diamond, J.

**PD** May 1989. **TI** Government Expenditure and Economic Growth: An Empirical Investigation. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/89/45; International Monetary Fund, Washington, D.C. 20431. **PG** 25. **PR** no charge. **JE** 121, 226, 322. **KW** Developing Countries. Capital. Government Spending. Growth Theory.

**AB** This paper examines the empirical evidence on the contribution that government and, in particular, capital expenditure makes to the growth performance of a sample of developing countries. Using the Denison growth accounting approach, this study finds that social expenditures may have a significant impact on growth in the short run, but infrastructure expenditures may have little influence. While current expenditures for directly productive purposes may exert a positive influence, capital expenditure in these sectors appears to exert a negative influence. Experiments with other explanatory variables confirm the importance of the growth of exports to the overall growth rate.

### Diebold, Francis X.

**PD** June 1989. **TI** Forecast Combination and Encompassing: Reconciling Two Divergent Literatures. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 80; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. **PG** 10. **PR** no charge. **JE** 211, 132. **KW** Forecast Pooling. Prediction. Hypothesis Testing. Forecasting. Model Selection.

**AB** This note is a discussion of "Combining Forecasts: A Review and Annotated Bibliography," by Robert T. Clemen. Research on forecast combination had largely moved to the operations research/management science areas. Many

econometricians apparently do not believe that recent research in forecast combination has been a worthwhile and productive undertaking. I examine this divergence of opinion and argue that it essentially stems from different loss functions. The relationship of forecast combination to recent developments in the theory and practice of model selection (in particular, the encompassing literature) is explored, the pragmatic virtues of forecast combination are argued, a synthesis is attempted, and caveats are provided.

**PD** June 1989. **TI** Nonparametric Exchange Rate Prediction?. **AU** Diebold, Francis X.; Nason, James M. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 81; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. **PG** 34. **PR** no charge. **JE** 431, 132. **KW** Nonlinearity. Forecasting. Exchange Rates. Martingale.

**AB** Much research has underscored the difficulty of predicting exchange rate movements, and it is now well established that changes in nominal exchange rates are approximately linearly unpredictable. Recently, however, strong evidence of conditional heteroskedasticity has been found in the prediction errors of such models. It is not clear whether such conditional heteroskedasticity is "structural", i.e., a characteristic of the true data generating process, or whether it indicates misspecification associated with linear conditional-mean representations. We address these issues by estimating nonparametrically the conditional mean functions of ten major nominal dollar spot rates, 1973-1987, which are used to produce in-sample and out-of-sample nonparametric forecasts.

### DiLeo, Paul

**PD** June 1989. **TI** Voluntary Conversions of LDC Debt. **AU** DiLeo, Paul; Remolona, Eli. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 8903; 33 Liberty St., Rm. 905, New York, NY 10045. **PG** 29. **PR** no charge. **JE** 121, 441, 443, 433. **KW** Debt-Equity Swaps. Exit Bonds. Developing Countries. Debt Crisis. Debt Conversion. Debtor Nation.

**AB** We estimate that out of a total of \$23 billion in LDC debt conversions in 1988, there was a reduction of \$8.5 billion in foreign liabilities. We argue, however, that the need for debt reduction is not what has been driving these market-based schemes. We think the debt conversions stem largely from the advantages to creditor banks of restructuring their relative exposures given the fact that different banks have different perceptions of return on LDC debt. We show that even without incentive effects on the debtor country, creditor banks will gain from debt-equity swaps, while the debtor country may or may not gain. In contrast, the debtor country will gain from exit-bond exchanges, while the banks may or may not gain.

### Dimsdale, N. H.

**PD** April 1989. **TI** Employment and Wage Flexibility in Interwar Britain. **AU** Dimsdale, N. H.; Nickell, Stephen J.; Horwood, N. **AA** Dimsdale: Queen's College, Oxford. **SR** Oxford Institute of Economics and Statistics. **AA** Horwood: Mansfield College, Oxford. **SR** Oxford Applied Economics Discussion Paper: 71; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. **PG** 19. **PR** no charge. **JE** 824, 821, 044, 825. **KW** Employment. Wages. Labor Market. Productivity.

**AB** The purpose of this paper is to investigate two issues concerning the labor market in Interwar Britain. First, what are the forces which generate labor movements between industries? Second, what are the forces which lead to shifts in relative wages between industries? In answer to the first question, we find that quantity signals (unemployment, vacancies) are very important whereas relative wages have little or no role to play. In answer to the second, in heavy industries, wages tend to respond in an employment stabilizing fashion to productivity and price movements but not to general labor market conditions. The opposite tends to be true in light industries.

#### **DiNardo, John**

**TI** Long-Term Contracts and Equilibrium Models of the Labor Market: Some Favorable Evidence. **AU** Beaudry, Paul; DiNardo, John.

#### **Dreyfus, Jean Francois**

**PD** May 1989. **TI** Accumulation Games and the Strategic Use of Defeasance. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: 517; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 36. **PR** \$4.00. **JE** 521. **KW** Corporate Debt. Cost-Benefit Analysis.

**AB** This paper presents a financial analysis of the costs and benefits attached to the strategic use of legal defeasance as a corporate debt refunding tool. While defeasance provides debtholders with a windfall gain if and when it occurs, these expected gains will be reflected in higher prices at the time of issuance. The optimality of defeasance is thus shown to ultimately depend on the resolution of the trade-off between (i) the reduction in refunding costs afforded by defeasance when the issue has been accumulated by strategic investors and (ii) the higher incidence of accumulation due to trading profit opportunities created by the existence of a positive probability of defeasance.

#### **Dubey, Pradeep**

**PD** February 1989. **TI** Liquidity and Bankruptcy with Incomplete Markets: Pure Exchange. **AU** Dubey, Pradeep; Geanakoplos, John. **AA** Dubey: State University of New York at Stony Brook. Geanakoplos: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 900; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 60. **PR** \$2.00. **JE** 021, 022. **KW** Incomplete Markets. General Equilibrium. Bankruptcy. Liquidity Constraints.

**AB** We enlarge the standard model of general equilibrium with incomplete market (GEI), to incorporate liquidity constraints as well as the possibility of bankruptcy and default. A new equilibrium results, which we abbreviate GELBI (general equilibrium with liquidity, bankruptcy and incomplete markets). When the supply of bank money and bankruptcy/default penalties are taken sufficiently high (the high regime), GEI occur as GELBI. But outside the high regime many new phenomena appear: money is (almost) never neutral, it has positive value and its optimum quantity is often finite; bankruptcy and default not only occur in equilibrium but can have welfare improving consequences for everyone; there is no real indeterminacy even with financial assets.

#### **Dumas, E. B.**

**PD** August 1989. **TI** Nonparametric Tests of Portfolio Efficiency Under Static and Dynamic Conditions. **AU** Dumas, E. B.; Sengupta, Jati K. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 30-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 23. **PR** no charge. **JE** 313, 212. **KW** Nonparametric Tests. Mutual Funds. Portfolios.

**AB** A set of nonparametric tests which includes the stochastic dominance criteria is developed here for evaluating the performance of mutual fund portfolios in relation to the market index. The empirical results support the hypothesis that some funds tend to dominate the market on the average, when a second order stochastic dominance criterion is used.

#### **Dybvig, Philip H.**

**PD** August 1989. **TI** Warranties, Durability, and Maintenance: Two-Sided Moral Hazard in a Continuous-Time Model. **AU** Dybvig, Philip H.; Lutz, Nancy A. **AA** Dybvig: Washington University in St. Louis. Lutz: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 922; Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 18. **PR** no charge. **JE** 611, 514, 026, 022. **KW** Warranties. Moral Hazard. Incentives. Product Quality.

**AB** We consider the provision of an optimal warranty in a continuous-time model with two-sided moral hazard. The optimal warranty must balance the producer's durability incentive and the buyer's maintenance incentive. Too little warranty protection gives the producer too much incentive to produce low durability, while too much warranty protection gives the consumer too much incentive to neglect maintenance. The derived optimal warranty is a "block warranty" that is high for an initial block of time and zero thereafter. The first-best would be available under a very high warranty for a very short time interval, except for the incentive this would create for the consumer to abuse the product to collect the warranty.

#### **Ebener, Patricia**

**TI** The Legal and Economic Consequences of Wrongful Termination. **AU** Dertouzos, James N.; Holland, Elaine; Ebener, Patricia.

#### **Edwards, Phillip M.**

**TI** Transformation for an Exact Goodness-of-fit Test of Structural Change in the Linear Regression Model. **AU** King, Maxwell L.; Edwards, Phillip M.

#### **Edwards, Sebastian**

**PD** September 1988. **TI** The Determination of Equilibrium Real Exchange Rate. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 508; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 59. **PR** \$2.50; checks payable to U.C. Regents. **JE** 431, 121, 113. **KW** Devaluation. Developing Countries. Exchange Rates.

**AB** This paper corresponds to Chapter 2 of the forthcoming book, "Real Exchange Rates. Devaluation and Adjustment: Exchange Rate Policy in Developing Countries." This work

investigates aspects related to exchange rates in developing nations. Theoretical models of equilibrium and disequilibrium exchange rates are developed; the behavior of real exchange rates is investigated for a large cross selection of countries; and the effectiveness of devaluation is assessed for a group of 39 developing nations.

**PD** September 1988. **TI** Macroeconomic Policies, Real Exchange Rate Misalignment and Devaluation. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 509; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 37. **PR** \$2.50; checks payable to U.C. Regents. **JE** 431, 121, 113. **KW** Devaluation. Exchange Rates. Developing Countries.

**AB** This paper corresponds to Chapter 3 of the forthcoming book, "Real Exchange Rates. Devaluation and Adjustment: Exchange Rate Policy in Developing Countries." This work investigates aspects related to exchange rates in developing nations. Theoretical models of equilibrium and disequilibrium exchange rates are developed; the behavior of real exchange rates is investigated for a large cross section of countries; and the effectiveness of devaluation is assessed for a group of 39 developing nations.

**PD** September 1988. **TI** Real Exchange Rates Behavior in Developing Countries: The Cross Country Evidence. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 510; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 43. **PR** \$2.50; checks payable to U.C. Regents. **JE** 431, 121, 113. **KW** Devaluation. Exchange Rates. Developing Countries.

**AB** This paper corresponds to Chapter 4 of the forthcoming book, "Real Exchange Rates. Devaluation and Adjustment: Exchange Rates Policy in Developing Countries." This work investigates several aspects related to exchange rates in developing nations. Theoretical models of equilibrium and disequilibrium exchange rates are developed; the behavior of real exchange rates is investigated for a large cross section of countries; and the effectiveness of devaluation is assessed for a group of 39 developing nations.

**PD** September 1988. **TI** Introduction to Real Exchange Rates, Devaluation and Adjustment. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 507; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 20. **PR** \$2.50; checks payable to U.C. Regents. **JE** 431, 121, 113. **KW** Exchange Rates. Devaluation. Developing Countries. Economics Adjustment.

**AB** This paper corresponds to Chapter 1 of the forthcoming book, "Real Exchange Rates. Devaluation and Adjustment: Exchange Rates Policy in Developing Countries." This work investigates several aspects related to exchange rates in developing nations. Theoretical models of equilibrium and disequilibrium exchange rates are developed; the behavior of real exchange rates is investigated for a large cross section of countries; and the effectiveness of devaluation is assessed for a group of 39 developing nations.

**PD** September 1988. **TI** Real and Nominal Determinants of Real Exchange Rates: The Empirical Evidence.

**AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 511; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 41. **PR** \$2.50; checks payable to U.C. Regents. **JE** 431, 411, 121, 113. **KW** Exchange Rates. Devaluation. Developing Countries.

**AB** This paper corresponds to Chapter 5 of the forthcoming book, "Real Exchange Rates. Devaluation and Adjustment: Exchange Rate Policy in Developing Countries." This work investigates aspects related to exchange rates in developing nations. Theoretical models of equilibrium and disequilibrium exchange rates are developed; the behavior of real exchange rates is investigated for a large cross section of countries; and the effectiveness of devaluation is assessed for a group of 39 developing nations.

**PD** September 1988. **TI** Real and Monetary Determinants of Real Exchange Rate Behavior: Theory and Evidence from Developing Countries. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 506; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 43. **PR** \$2.50; checks payable to U.C. Regents. **JE** 411, 431, 121, 113. **KW** Exchange Rates. Balance of Payments. Dynamic Model. Developing Countries. Devaluation.

**AB** This paper develops a dynamic model of real exchange rate behavior in developing countries. A three good economy (exportables, importables and nontradables) is considered. Residents of this country hold domestic and foreign assets, and there is a dual exchange rate regime. There is a government that consumes importables and nontradables. A distinction is made between equilibrium and disequilibrium movements of the RER. The determinants of real exchange rate misalignment are studied with emphasis placed on the role of devaluations and balance of payments crises. The implications of the model are tested using data for 12 developing countries. The results obtained are generally favorable for the model. The issue of RER stationarity is also analyzed.

**PD** February 1989. **TI** Devaluation Crises and the Macroeconomic Consequences of Postponed Adjustment in Developing Countries. **AU** Edwards, Sebastian; Montiel, Peter. **AA** Edwards: University of California, Los Angeles. Montiel: International Monetary Fund. **SR** National Bureau of Economic Research Working Paper: 2866; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** 431, 133, 121, 411. **KW** Devaluation. Exchange Rate. Developing Countries.

**AB** This paper develops our analytical model to explore the relationship between the dynamics of macroeconomic adjustment and the timing of the implementation of an adjustment program featuring an official devaluation. The effects of postponing adjustment depend on the source of the original shock. In the case of fiscal expansion, postponement implies a larger eventual official devaluation and greater deviations of macroeconomic variables from their steady-state values. For adverse terms of trade shocks, postponement does not affect the size of the eventual official devaluation, but does magnify the amount of post-devaluation overshooting by key macroeconomic variables.

**Ehrenberg, Eric**

**TI** School District Leave Policies, Teacher Absenteeism, and Student Achievement. **AU** Ehrenberg, Ronald; Ehrenberg, Randy A.; Rees, Daniel; Ehrenberg, Eric.

**Ehrenberg, Randy A.**

**TI** School District Leave Policies, Teacher Absenteeism, and Student Achievement. **AU** Ehrenberg, Ronald; Ehrenberg, Randy A.; Rees, Daniel; Ehrenberg, Eric.

**Ehrenberg, Ronald**

**PD** March 1989. **TI** School District Leave Policies, Teacher Absenteeism, and Student Achievement. **AU** Ehrenberg, Ronald; Ehrenberg, Randy A.; Rees, Daniel; Ehrenberg, Eric. **AA** Cornell University. **SR** National Bureau of Economic Research Working Paper: 2874; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$2.00. **JE** 812, 931. **KW** Retirement. Pensions. Sick Pay. Absenteeism.

**AB** In an effort to reduce salary costs, many school districts have begun to offer teachers financial incentives to retire early. Often, however, these districts have limits on the number of cumulated unused sick leave days that teachers may receive cash payments, credits toward future health insurance, or retirement credits for, at retirement. This paper, which is based on an extensive data collection effort by the authors, presents an econometric analyses of variations in teacher and student absenteeism across the over 700 school districts in New York State in 1986-1987 and of how such variations influence student test score performance.

**Eichengreen, Barry**

**PD** February 1989. **TI** Dealing with Debt: The 1930s and the 1980s. **AU** Eichengreen, Barry; Portes, Richard. **AA** Eichengreen: University of California, Berkeley. Portes: University of London. **SR** National Bureau of Economic Research Working Paper: 2867; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** \$2.00. **JE** 443, 432, 441, 411. **KW** Sovereign Debt. Debt Crisis. Debt Default. Public Debt. Capital Market.

**AB** This paper analyzes the sovereign defaults of the 1930s and their implications for the debt crisis of the 1980s. It reports nine major findings including: (1) There is little evidence that financial markets have grown more sophisticated over time, or that banks have a comparative advantage over the bond market in processing information. (2) Debt default in the 1930s depended on a combination of factors, including the magnitude of the external shock, the level of debt and the economic policy response, as well as on a range of noneconomic considerations. (3) Countries which interrupted service recovered more quickly from the Great Depression than countries which resisted default. This contrasts with the experience of the 1980s, when no clearcut relationship exists.

**Eisenbeis, Robert A.**

**PD** August 1989. **TI** Are Real Estate Specializing Depositories Viable? The Evidence from Commercial Banks. **AU** Eisenbeis, Robert A.; Kwast, Myron L. **AA** Eisenbeis: University of North Carolina, Chapel Hill. Kwast: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 88; C/O Jeffrey C. Fuhrer, Mail

Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 66. **PR** no charge. **JE** 312, 314. **KW** Banks. Real Estate. Commercial Banks. Banking.

**AB** The economic viability of real estate specialized depository institutions is studied by comparing the risk characteristics, profitability and operating costs, and asset and liability composition of three sets of banks -- banks that chose in a given year to specialize in real estate lending, banks that chose over a relatively long period of time to specialize in real estate lending, and other commercial banks. Results suggest that, over 1978 through 1987, the average real estate specialized bank performed quite adequately, while the longer term specialized institutions substantially outperformed even regular commercial banks. The average real estate bank was no more risky than other commercial banks. Indeed, the typical long term real estate bank was, on average, less risky over the entire period.

**Elmendorf, Douglas**

**TI** Budget Deficits, Tax Incentives and Inflation: A Surprising Lesson from the 1983-84 Recovery. **AU** Feldstein, Martin; Elmendorf, Douglas.

**Elton, Edwin J.**

**PD** May 1989. **TI** The Structure of Spot Rates and Immunization. **AU** Elton, Edwin J.; Gruber, Martin J.; Michaely, Roni. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: 520; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 17. **PR** \$4.00. **JE** 313. **KW** Spot Rates. Bond Pricing. Asset Market.

**AB** Most empirical studies of the modern theories of bond pricing choose a proxy for the state variable(s) in a rather arbitrary fashion. This paper empirically analyzes the structure of spot rates and derives the optimal spot rates to use as state variables. We choose the spot rate which maximizes the overall unexpected change in the yield curve. Our findings indicated that as a proxy in the one state variable model, the four year spot rate serves as the best proxy. In the case of the two state variables model, the six year and eight month rates are chosen.

**Engel, Charles**

**PD** February 1989. **TI** Conditional Mean-Variance Efficiency of the U.S. Stock Market. **AU** Engel, Charles; Frankel, Jeffrey A.; Froot, Kenneth A.; Rodrigues, Anthony P. **AA** Engel: University of Virginia. Frankel: Harvard University. Froot: Massachusetts Institute of Technology. Rodrigues: Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 8901; 33 Liberty St., Rm. 905, New York, NY 10045. **PG** 24. **PR** no charge. **JE** 313. **KW** Mean-Variance Efficiency. Stock Market. ARCH Models. Portfolios. Investment. Asset Returns.

**AB** We apply the method of constrained asset share estimation (CASE) to test the mean-variance efficiency (MVE) of the stock market. This method allows conditional expected returns to vary in unrestricted ways, given investor preferences. We also allow conditional variances to follow an ARCH process. The data estimate the coefficient of relative risk aversion, though are unable to reject investor risk neutrality. We reject the restrictions implied by MVE, although changing

conditional variances improve statistically upon measured market efficiency. We find that unrestricted asset share and ARCH models help forecast excess returns. Once MVE is imposed, however, this forecasting ability disappears.

**Englander, A. Steven**

**PD** April 1989. **TI** Tests for Measurement of Service Sector Productivity. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 8906; 33 Liberty St., Rm. 905, New York, NY 10045. **PG** Not available. **PR** no charge. **JE** 635, 825, 621. **KW** Productivity. Services. Technology.

**AB** The intangibility of most services, combined with the extremely slow measured rates of productivity growth in services, raises questions as to the adequacy of service sector productivity measurement. This paper attempts to test whether service sector productivity is mismeasured by examining whether economic agents are behaving as if the data are correct. The approach extends the set of indicators of measurement adequacy and places the discussion in a hypothesis testing framework.

**English, William B.**

**PD** June 1989. **TI** On the Irrelevance of Some Forms of Credit Constraints. **AA** University of Pennsylvania, Philadelphia. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 89-09; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 47. **PR** no charge. **JE** 311, 321, 322. **KW** Credit. Ricardian Equivalence. Government Policy. Government Spending. Fiscal Policy. Credit Constraints.

**AB** Some economists have offered credit constraints as an explanation for two phenomena. First, credit constraints can explain why changing the method of financing a given stream of government spending--say from taxation to debt--could have an effect on real output. Second, constraints could also allow government asset market interventions to have large effects on output while having little effect on interest rates. This paper considers the effects of government asset market interventions in an economy characterized by a particular type of credit constraint. I show that the effects of changes in government policy are similar to those in a model without constraints. In particular, there is no direct "quantity effect" of changes in policy on the economy. Instead, the policy shifts affects the economy through changes in interest rates.

**Epstein, Larry G.**

**PD** June 1988. **TI** The Relation between Utility and the Price of Equity. **AA** University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8808; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 39. **PR** Gratis (if in stock). **JE** 313, 021, 022, 026. **KW** Asset Pricing. Nonrecursive Utility. Nash Equilibrium. Intertemporal Substitution. Risk Aversion. Utility Theory.

**AB** The structure of the equilibrium price of equity is explored in a general equilibrium exchange model with an infinitely-lived, representative agent. The latter's utility function is stationary and homogeneous, but need not be expected utility or even recursive. It is argued that the notion of a Nash equilibrium price function is the appropriate

generalization of the familiar Arrow-Debreu equilibrium price function to the case where preferences need not be intertemporally inconsistent. The existence of a unique equilibrium is proven and the relationship between utility theory (i.e., alternative functional forms or axioms for utility functions) and the structure of the price of aggregate equity is elucidated.

**TI** Mixture Symmetric Utility Theory. **AU** Chew, S. H.; Epstein, Larry G.; Segal, Uzi.

**Ericsson, Neil R.**

**PD** April 1989. **TI** Exact and Approximate Multi-period Mean-square Forecast Errors for Dynamic Econometric Models. **AU** Ericsson, Neil R.; Marquez, Jaime R. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 348; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 47. **PR** no charge. **JE** 211, 212, 215. **KW** Forecasting. Autoregressive Models. Confidence Intervals. Maximum Likelihood. Forecast Error. Time Series. Dynamic Model.

**AB** Both future disturbances and estimated coefficients contribute to the uncertainty in model-based ex ante forecasts, but only the first source is usually taken into account when calculating confidence intervals for practical applications. Schmidt (1974) and Baillie (1979) provide an easily computable second-order approximation to the mean-square forecast error (MSFE) for linear dynamic systems which recognizes both sources of uncertainty. To assess the accuracy of their approximation, and thus its usefulness, we compare it with three sets of estimates of the exact MSFE for the univariate AR(1) process: Monte Carlo estimates for OLS, analytically based values for OLS, and Monte Carlo estimates for maximum likelihood.

**Estrella, Arturo**

**PD** April 1989. **TI** The Implicit Liabilities of the Pension Benefit Guaranty Corporation. **AU** Estrella, Arturo; Hirtle, Beverly. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 8905; 33 Liberty St., Rm. 905, New York, NY 10045. **PG** Not available. **PR** no charge. **JE** 311, 323, 521. **KW** Pension Funding. Pensions.

**AB** The purpose of this paper is (i) to develop and apply a framework for evaluating the impact of expected pension plan terminations on the funding position of the PBGC and (ii) to explore alternative means of correcting the funding deficiencies that face the agency both now and in the future. We find that expected future terminations increase the PBGC's funding gap by about \$17 billion. Several alternatives for bridging this gap are considered, including raising premiums, using general revenues, and modifying the tax-deductibility of pension contributions.

**PD** May 1989. **TI** The Term Structure as a Predictor of Real Economic Activity. **AU** Estrella, Arturo; Hardouvelis, Gikas A. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 8907; 33 Liberty St., Rm. 905, New York, NY 10045. **PG** Not available. **PR** no charge. **JE** 313, 311, 132, 133. **KW** Term Structure. Yield Curve. Business Cycles. Leading Indicators. Prediction.

**AB** A positive slope of the yield curve is associated with a future increase in real economic activity: consumption (non-durables plus services), consumer durables, and investment. It has extra predictive power over and above the predictive power of the index of leading indicators, the level of real short term interest rates, lagged growth in economic activity, and lagged rates of inflation. It outperforms survey forecasts both in-sample and out-of-sample. The information in the slope has so far been potentially useful both to private investors and to the Federal Reserve in its conduct of monetary policy because it reflects expectations of how future shocks to real output will affect future interest rates (expected shifts of the textbook IS curve), rather than expectations of how future changes in interest rates will affect future real output (expected shifts of the textbook LM curve).

### Evans, Martin D. D.

**PD** March 1989. **TI** What Can the Term Structure Tell Us About Expected Inflation: A Theoretical Analysis. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: 510; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 27. **PR** no charge. **JE** 134, 131, 133, 311. **KW** Exogenous Shocks. Inflation. Fluctuations. Term Structure. Monetary Policy. Bond Returns.

**AB** This paper examines whether the slope of the yield curve remains a reliable guide to expected future inflation in the presence of fluctuations in the distributions of exogenous shocks that lead to a breakdown in the expectations theory of the term structure. Overall, the analysis suggests that, under a monetary policy that aims to stabilize inflation, the slope of the yield curve is a more reliable guide to future inflation when fluctuations in the variance of nominal rather than the real shocks are the underlying source of the variations in the conditional distributions of bond returns.

**PD** April 1989. **TI** Interpreting the Term Structure Using the Intertemporal Capital Asset Pricing Model: An Application of the Non-Linear Arch-M Model. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: 514; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 30. **PR** \$4.00. **JE** 313, 311, 212. **KW** ARCH. Stock Market. Asset Pricing. CAPM. Portfolios. Hedging.

**AB** A nonlinear version of the ARCH-M model is used to examine whether the predictability of excess holding return on bills and bonds can be explained within the context of the Intertemporal Capital Asset Pricing Model [ICAPM]. The paper focuses on how the statistical performance of the ICAPM is affected by: (i) the choice of hedge portfolios, (ii) the dynamics of the betas implied by the variations in the covariance matrix of returns, and (iii) the estimation of expected portfolio returns. Evidence is found to support the theoretical restrictions between the dynamics of the betas and the movements in the covariance matrix of returns in a model where the benchmark portfolio includes both stocks and real estate and the expected returns on these assets are estimated nonparametrically.

**PD** May 1989. **TI** On the Changing Nature of the Output-Inflation Trade-off. **AA** New York University. **SR** New York University Salomon Brothers Center Working

Paper: 516; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 26. **PR** \$4.00. **JE** 134, 131, 133, 023. **KW** Macroeconomics. Inflation. Output. Vector Autoregression. Structural Shocks.

**AB** This paper examines the U.S. output-inflation trade-off in a time series context by estimating structural models for the innovations to output and inflation obtained from a vector autoregression. The paper departs from earlier research by allowing the relation between the "structural shocks" and the innovations to output and inflation to vary over time. Estimates from a structural model that take account of this "stylized fact" appear to favor the New Keynesian rather than New Classical predictions about the changing nature of the output-inflation trade-off.

### Faigle, Ulrich

**TI** Permutahedron of Series-Parallel Posets. **AU** Arnim, Annelie; Faigle, Ulrich; Schrader, Rainer.

### Fair, Ray C.

**PD** March 1989. **TI** The Production Smoothing Model is Alive and Well. **AA** Yale University. **SR** National Bureau of Economic Research Working Paper: 2877; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 17. **PR** \$2.00. **JE** 611, 229, 631. **KW** Production. Microdata. Measurement Error. Manufacturing.

**AB** Monthly data in physical units for seven industries are used to examine the production smoothing hypothesis. The results strongly support this hypothesis. Significant effects of expected future sales on current production are found for four industries, and the estimated decision equations for all seven industries imply production smoothing behavior. The previous negative results regarding the hypothesis appear to be due to the use of poor data, particularly the shipments and inventory data of the Department of Commerce.

**PD** August 1989. **TI** Full Information Estimation and Stochastic Simulation of Models with Rational Expectations. **AU** Fair, Ray C.; Taylor, John B. **AA** Fair: Yale University. Taylor: Council of Economic Advisers. **SR** Yale Cowles Foundation Discussion Paper: 921; Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 21. **PR** no charge. **JE** 211, 132. **KW** Stochastic Simulation. Rational Expectations. Maximum Likelihood. Macroeconomic Model.

**AB** A computationally feasible method for the full information maximum likelihood estimation of models with rational expectations is described in this paper. The stochastic simulation of such models is also described. The methods discussed in this paper should open the way for many more tests of the rational expectations hypothesis within macroeconomic models.

### Farber, Henry

**PD** February 1989. **TI** Trends in Worker Demand for Union Representation. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 2857; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 9. **PR** \$2.00. **JE** 831, 833, 813. **KW** Trade Unions. Labor Force. Working Conditions. Unions.

**AB** The dramatic decline in the demand for union representation among nonunion workers over the last decade is investigated using data on worker preferences for union representation from four surveys conducted in 1977, 1980, 1982, and 1984. Relatively little of the decline can be accounted for by shifts in labor force structure. However, virtually all of the decline is correlated with an increase in the satisfaction of nonunion workers with their jobs and a decline in nonunion workers' beliefs that unions are able to improve wages and working conditions.

**Farmer, Roger E. A.**

**PD** March 1989. **TI** The Lucas Critique, Policy Invariance and Multiple Equilibria. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 551; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 21. **PR** \$2.50. **JE** 023, 211. **KW** Rational Expectations. Policy Invariance. Policy Evaluation. Econometric Models.

**AB** The Lucas of Econometric Policy Evaluation argues that the parameters of econometric models are subject to theoretical cross equation restrictions which follow from the fact that the endogenous variables of the models are chosen optimally by forward looking agents. In this paper I argue that these facts alone are insufficient to generate such restrictions. I present an example of a simple economic model in which there exists a forecast rule for future prices which is independent of the parameters of the process that generate the exogenous variables of the model. In models in which there exist multiple stationary rational expectations equilibria, immunity to the Lucas Critique is proposed as a natural criterion for selecting an equilibrium.

**Farrell, Joseph**

**PD** February 1989. **TI** Cheap Talk with Two Audiences. **AU** Farrell, Joseph; Gibbons, Robert. **AA** Farrell: University of California Berkeley and Hoover Institution. Gibbons: Massachusetts Institute of Technology. **SR** Stanford Hoover Institute Working Paper in Economics: E-89-7; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 28. **PR** no charge. **JE** 026, 024. **KW** Cheap Talk. Signalling. Communication. Incentives.

**AB** When an informed party can engage in cheap talk with more than one audience we show how the presence of one audience may either discipline or subvert the speaker's relationship with the other audience. We ask how welfare is affected by public or private disclosure, and predict how much communication will take place.

**PD** August 1989. **TI** Standardization and Intellectual Property. **AA** Hoover Institution and University of California, Berkeley. **SR** Stanford Hoover Institute Working Paper in Economics: E-89-25; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 30. **PR** no charge. **JE** 621, 611, 612. **KW** Copyright. Patents. Computer Software. Technology.

**AB** Legal protection of intellectual work may importantly affect standardization in industries, including computers and software, where compatibility is important. For example, stronger protection may exacerbate the problems of vested interest that obstruct formal standardization. Therefore,

compatibility issues are important in the choice of policy on the legal protection of intellectual works, both in the matter of how strong protection should be, and also in how it is achieved. These considerations suggest that, CONTU's recommendation notwithstanding, copyright may be an inefficient way to protect computer software.

**Favero, Carlo**

**PD** February 1989. **TI** Testing for Superexogeneity: The Case of the Term Structure of Interest Rates. **AA** St. Antony's College, Oxford. **SR** Oxford Applied Economics Discussion Paper: 67; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. **PG** 31. **PR** no charge. **JE** 311, 211, 212. **KW** Monetary Theory. Co-Integration. Interest Rates. Exogeneity.

**AB** The central idea of the paper is that linearization makes the expectational model of the term structure of interest rates subject to the Lucas critique: in a linearized expectational model the short term interest rate is not superexogenous for the estimation of the parameters of interest. A testing procedure based on co-integration is used to select a version of the expectational model. Then, a test for superexogeneity is applied to a linearized and a nonlinear version, to show that the null hypothesis of superexogeneity of the short term interest rate is rejected in the former but cannot be rejected in the latter.

**Feenberg, Daniel**

**PD** February 1989. **TI** Sources of IRA Saving. **AU** Feenberg, Daniel; Skinner, Jonathan. **AA** Feenberg: National Bureau of Economic Research. Skinner: University of Virginia. **SR** National Bureau of Economic Research Working Paper: 2845; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** \$2.00. **JE** 921, 312, 323. **KW** Retirement. Savings. Taxes. Capital. Investment. Households.

**AB** To address the question of whether IRAs contribute to capital formation, we use the IRS/University of Michigan taxpayer sample for income tax returns during 1980-84. By matching families across a five-year period, we can estimate the dynamic interactions of IRA purchases and other types of saving, correct for individual differences, and test whether IRA purchases are in part offset by other (net) asset sales. The "reshuffling" hypothesis implies that taxpayers who enroll in IRAs should, over time, experience a drop in net taxable interest and dividend income as their taxable assets (or new loans) are used to purchase IRAs. Conversely, the "new saving" view of IRAs implies that taxable interest and dividend income should be unaffected by IRA purchases. We find little or no evidence which favors the view that IRAs are funded by cashing out existing taxable assets.

**Feenstra, Robert C.**

**TI** Eliminating Price Supports: A Political Economy Perspective. **AU** Lewis, Tracy R.; Ware, Roger; Feenstra, Robert C.

**PD** February 1989. **TI** Auctioning U.S. Import Quotas, Foreign Response, and Alternative Policies. **AA** University of California, Davis. **SR** National Bureau of Economic Research Working Paper: 2839; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 14. **PR** \$2.00. **JE** 422, 431, 323. **KW** Imports. Quotas. Auctions. Free Trade. Tariffs. Commercial Policy.

**AB** In this paper we quantify the potential revenue available

to the U.S. from auctioning import quotas, and the resulting drop in foreign producer surplus relative to free trade. Previous estimates of auction revenue are in the range of \$3.7-5.15 billion for 1986 or 1987. Using simulation results from computable partial or general equilibrium models, we find that this revenue gain would be at the expense of a large drop in foreign producer surplus. One alternative to auction quotas is a system of tariff rate quotas, which are designed to keep supplier countries welfare equal to that in free trade. We calculate that the tariff rate quotas could raise \$0.67-1.55 billion in revenue for the U.S.

**PD** March 1989. **TI** Trade Adjustment Assistance and Pareto Gains from Trade. **AU** Feenstra, Robert C.; Lewis, Tracy R. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 343; Department of Economics, University of California at Davis, Davis, CA 95616. **PG** 30. **PR** no charge. **JE** 422, 821, 411. **KW** Trade Adjustment. Mobility Costs. Lump-sum Transfers. Taxation. Taxes.

**AB** In this paper we examine the role of Trade Adjustment Assistance (TAA) in obtaining Pareto gains from trade. We assume that all individuals are imperfectly mobile, meaning that at autarky wages their choice of industry(s) of employment is unique. In this setting Pareto gains from trade are not achieved with the Dixit-Norman scheme of commodity taxation, since this scheme keeps wages at their autarky level, so factors have no incentive to move. This gives an important role to TAA, as a means to encourage relocation of factors across industries. We examine three versions of TAA, ranging from the theoretically most desirable to what has been used in practice.

**PD** July 1989. **TI** Distance, Demand, and Oligopoly Pricing. **AU** Feenstra, Robert C.; Levinsohn, James A. **AA** Feenstra: University of California, Davis. Levinsohn: University of Michigan, Ann Arbor. **SR** University of California at Davis Economics Department Working Paper: 342; Department of Economics, University of California at Davis, Davis, CA 95616. **PG** 44. **PR** no charge. **JE** 611, 022, 132. **KW** Oligopoly. Hedonic Regression. Product Differentiation. Pricing. Demand System.

**AB** We demonstrate how to estimate a model of product demand and oligopoly pricing when products are multidimensionally differentiated. We provide an empirical counterpart to recent theoretical work on product differentiation. Using specifications informed by economic theory, we simultaneously estimate a demand system and price-cost margins for products differentiated in many dimensions.

### Feldstein, Martin

**PD** January 1989. **TI** Budget Deficits, Tax Incentives and Inflation: A Surprising Lesson from the 1983-84 Recovery. **AU** Feldstein, Martin; Elmendorf, Douglas. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 2819; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** \$2.00. **JE** 133, 311, 321, 023. **KW** Inflation. Economic Recovery. Fiscal Policy. Monetary Policy. Exchange Rates.

**AB** The first two years of the economic expansion that began in 1983 were unusually strong and were accompanied by better inflation performance than would have been expected on the

basis of experience in past recoveries. Our evidence contradicts the popular view that the recovery was the result of a consumer boom financed by reductions in the personal income tax. We also find no support for the proposition that the recovery reflected an increase in the supply of labor induced by the reduction in personal marginal tax rates. The driving force behind the recovery of nominal demand was the shift to an expansionary monetary policy. The rapid expansion of nominal GNP can be explained by monetary policy without any reference to changes in fiscal and tax policy.

**PD** January 1989. **TI** Imperfect Annuity Markets, Unintended Bequests, and the Optimal Age Structure of Social Security Benefits. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 2820; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** \$2.00. **JE** 918, 915, 921, 022. **KW** Social Security. Retirement. Bequests. Welfare Costs.

**AB** The social security program now provides a constant real benefit throughout each retiree's lifetime. This paper examines whether total welfare would rise if benefits were lower in early retirement years (when most individuals have some saving with which to finance consumption) and higher in later years (when the uncertainty of survival and the absence of actuarially fair private annuities makes the availability of social security benefits more important).

**PD** February 1989. **TI** Tax Policies for the 1990's: Personal Saving, Business Investment, and Corporate Debt. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 2837; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 12. **PR** \$2.00. **JE** 323, 522, 514, 611. **KW** Tax Reform. Taxes. Investment. Capital Gains.

**AB** Although the tax reforms of the 1980s substantially lowered the excess burden caused by high marginal tax rates, there were also significant adverse effects on incentives to save and to invest in business plant and equipment. Effective tax rates on real capital gains and real net interest income remain very high because the tax rules do not recognize the difference between real and nominal magnitudes. Existing tax rules bias corporate decisions in favor of debt finance relative to equity finance and in favor of investments in intangible assets (like advertising, consumer goodwill, and R & D) relative to investments in plant and equipment.

**PD** February 1989. **TI** The Case Against Trying to Stabilize the Dollar. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 2838; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 13. **PR** \$2.00. **JE** 431, 113, 133. **KW** Exchange Rates. Economic Policy. Monetary Policy. Policy Coordination.

**AB** Better domestic economic policies in the 15 years since the collapse of the Bretton Woods system would have prevented the extreme fluctuations of the dollar's exchange value during those years. The pursuit of good policies here and abroad in the future should reduce the likelihood of such substantial exchange rate swings in the years ahead. But elevating exchange rate stability to a separate goal of economic policy could have serious adverse consequences. Trying to achieve that goal would mean diverting monetary and fiscal policies from their customary roles and thereby risking

excessive inflation and unemployment and inadequate capital formation.

### **Fernandez, Raquel**

**PD** May 1988. **TI** Sovereign-Debt Renegotiations: A Strategic Analysis. **AU** Fernandez, Raquel; Rosenthal, Robert W. **AA** Boston University. **SR** National Bureau of Economic Research Working Paper: 2597; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** Not available. **PR** \$2.00. **JE** 443, 432, 411. **KW** Sovereign Debt. National Debt. Creditors. Debt Rescheduling. Debt Crisis.

**AB** The process of debt rescheduling between a creditor and a sovereign (LDC) debtor is modeled as a noncooperative game built on a one-sector growth model. The creditor's threat to impose default penalties is ignored here as inherently incredible; instead, the debtor's motivation for repayment is to reap benefits from attaining an improved credit standing in inter-national capital markets. The creditor can forgive portions of the outstanding debt, so that a real-time bargaining process results with concessions being in the form of debt-service payments by the debtor and debt forgiveness by the creditor. Subgame perfect equilibria of the game are characterized: the main finding is that these all result in Pareto optima in which the creditor extracts all the surplus.

### **Fishburn, Peter C.**

**TI** Coalition Voting. **AU** Brams, Steven J.; Fishburn, Peter C.

### **Fishelson, Gideon**

**PD** July 1989. **TI** The Hotelling Model Under Uncertainty: A Note. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 28-89; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 12. **PR** no charge. **JE** 022, 026, 721. **KW** Natural Resources. Risk. Uncertainty. Exhaustible Resources.

**AB** In this study we provide an examination of changes in the parameters of the Hotelling model for an exhaustible resource and a competitive industry. It turns out that in spite of each firm being risk neutral and assuming a linear demand for the resource, the randomness in each parameter affects the initial market price and the length of the extraction period.

### **Flam, Harry**

**PD** February 1989. **TI** Adverse Selection in Credit Markets and Infant Industry Protection. **AU** Flam, Harry; Staiger, Robert W. **AA** Flam: University of Stockholm. Staiger: Stanford University. **SR** National Bureau of Economic Research Working Paper: 2864; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** \$2.00. **JE** 411, 441, 121. **KW** Credit Market. Infant Industries. Protectionism. Government Policy.

**AB** This paper considers the role for infant industry protection when credit markets suffer from adverse risk selection. We show that asymmetric information about firm-specific risk leads to underfunding of the infant industry in a competitive credit market. A small amount of infant industry protection is shown to be welfare improving, and the optimal infant industry tariff is derived. Finally, an alternative government policy of production subsidies is considered under

the assumption that the government shares private knowledge with infant industry firms. We argue that a tariff may dominate production subsidies as an entry promoting device in this context.

### **Flinn, Christopher J.**

**PD** April 1989. **TI** Wage Rates and Layoff Risk in a Local Labor Market. **AA** New York University. **SR** New York University Economic Research Reports: 89-09; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 39. **PR** none. **JE** 824, 821. **KW** Employments. Wages. Layoffs. Compensating Differentials. Labor Market. Wage Differentials.

**AB** By postulating the existence of a compensating differentials equilibrium (CDE) in a local labor market, we are able to derive an estimable model of employment contract choice when firms differ in the hours distributions offered to employees. Under our assumptions regarding preferences and the properties of dynamic wage functions, we impose restrictions on the mapping of hours distributions into time-invariant compensating wage differentials paid by firms. This enables estimation of most behavioral parameters, and permits the construction of direct tests of the compensating differentials model. The empirical analysis employs data from an historical labor market, and some evidence supporting the hypothesis that a CDE was present in the market for furniture workers in Grand Rapids, Michigan in 1889 is presented.

### **Fons, Jerome S.**

**PD** June 1989. **TI** The Impact of Supplies on Securities Prices and Implications of Privatization. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 8910; 33 Liberty St., Rm. 905, New York, NY 10045. **PG** Not available. **PR** no charge. **JE** 441, 123. **KW** Privatization. Asset Pricing. Securities. Capital Market. International Investment.

**AB** This paper examines the impact privatization may have on the world's financial markets. We first illustrate the increase in the outstanding stock of equities and possible increase in gross credit market debt that accompanies privatization using an accounting model. Next, a mean-variance demand framework is used to estimate changes in expected asset returns due to asset stock changes consistent with privatization programs in five developed and two developing countries. We find that asset stock changes, consistent with current privatization programs, have an insignificant effect on developed countries asset markets and a small effect on asset markets in the developing countries.

### **Frank, Murray**

**TI** Experimental Tests of Ricardian Equivalence. **AU** Cadsby, Charles Bram; Frank, Murray.

### **Frankel, Jeffrey A.**

**PD** February 1989. **TI** A Modest Proposal for International Nominal Targeting (INT). **AA** Harvard University. **SR** National Bureau of Economic Research Working Paper: 2849; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 54. **PR** \$2.00. **JE** 423, 411, 311. **KW** Economic Policy. Policy Coordination. International Trade.

**AB** The paper reviews the obstacles to successful

international macroeconomic policy coordination, and then offers a proposal for coordination that is designed to have the best chance of overcoming these obstacles: an international version of nominal GNP targeting. There are three sorts of obstacles to coordination: uncertainty, enforcement, and inflation fighting credibility. The paper argues that International Nominal Targeting (INT) is the best choice for nominal anchor, as well as the best choice for the performance criterion by which compliance with international agreements can be monitored. Nominal GNP (or, better yet, nominal demand) is superior to other candidates such as M1 as a candidate for the nominal variable on which policy makers should focus, because it is far more robust to velocity shifts and other uncertainties.

**PD** February 1989. **TI** Quantifying International Capital Mobility in the 1980s. **AA** Harvard University. **SR** National Bureau of Economic Research Working Paper: 2856; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** \$2.00. **JE** 431, 441, 423, 411. **KW** Interest Rates. Exchange Rates. Capital. Financial Markets. Economic Integration.

**AB** The Feldstein-Horioka finding, that national saving and investment have been highly correlated in the past, has not been primarily due to econometric problems such as endogenous fiscal policy; it has held up equally well when instrumental variables are used. But the inflow of capital to the United States has been so large in recent years that an updating of the sample period to 1987 produces a coefficient on national saving that is lower than in past studies. This decline in the degree of crowding out of investment can be attributed to the increased degree of financial market integration in the 1980s.

**TI** Conditional Mean-Variance Efficiency of the U.S. Stock Market. **AU** Engel, Charles; Frankel, Jeffrey A.; Froot, Kenneth A.; Rodrigues, Anthony P.

### Freeman, Scott

**TI** Money, Output, and the Nominal National Debt. **AU** Champ, Bruce; Freeman, Scott.

### Frenkel, Jacob A.

**PD** March 1989. **TI** International Effects of Tax Reforms. **AU** Frenkel, Jacob A.; Razin, Assaf. **AA** Frenkel: International Monetary Fund. Razin: Tel Aviv University. **SR** National Bureau of Economic Research Working Paper: 2873; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** \$2.00. **JE** 323, 431, 411. **KW** Taxes. Tax Reforms. Current Account.

**AB** This paper highlights the significance of open-economy considerations in the analysis of tax reforms. It focuses on domestic and international consequences of revenue-neutral conversions between income and value-added tax systems. The principal conclusion of this investigation is that the direction of changes in the world rate of interest, the domestic tax-adjusted rate of interest, domestic and foreign investment, growth rates of consumption, and other key macroeconomic variables consequent on revenue-neutral tax reforms depend on whether the country adopting the tax reform runs a surplus or a deficit in the current account of its balance of payments.

**PD** May 1989. **TI** International Spillovers of Taxation. **AU** Frenkel, Jacob A.; Razin, Assaf; Symansky, Steven.

**AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/89/43; International Monetary Fund, Washington, D.C. 20431. **PG** 35. **PR** no charge. **JE** 423, 441, 433, 411. **KW** Tax Policy. Borrowing. Economic Integration. International Policy.

**AB** This paper highlights key issues pertinent for the understanding of international effects of domestic tax policies and of international tax harmonization. The analytical framework adopts the saving-investment balance approach to the analysis of international economic interdependence focusing on income, consumption, and international borrowing. A simulation model is developed that is richer in structure than the two period analytical model.

### Friedman, Benjamin

**PD** February 1989. **TI** Money, Income and Prices after the 1980s. **AU** Friedman, Benjamin; Kuttner, Kenneth. **AA** Friedman: Harvard University. Kuttner: Federal Reserve Bank of Chicago. **SR** National Bureau of Economic Research Working Paper: 2852; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** \$2.00. **JE** 311, 133, 132, 023. **KW** Monetary Policy. Money Growth.

**AB** Empirical findings presented in this paper show that evidence based on the most recent U.S. experience does not indicate the kind of close or reliable relationship between money and nonfinancial economic activity that, if present, might warrant basing the design and implementation of monetary policy on money in a formally systematic way: First, extending the familiar time series analysis to include data from the 1980s sharply weakens the evidence from prior periods showing that such relationships existed between money and nominal income. Second, extending the analysis through 1987 also destroys the time series evidence from earlier periods showing that money and income are co-integrated.

### Friedman, Milton

**PD** December 1988. **TI** The "Plucking Model" of Business Fluctuations Revisited. **AA** Hoover Institution. **SR** Stanford Hoover Institute Working Paper in Economics: E-88-48; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 26. **PR** no charge. **JE** 131, 133, 023. **KW** Business Cycles. Plucking Model. Fluctuations.

**AB** Some twenty-five years ago, I suggested a model of business fluctuations that stresses occasional events producing contractions and subsequent revivals rather than a self-generating cyclical process. Evidence for the past quarter-century, like evidence presented earlier for a longer period, supports the view that the model is a useful way to interpret business fluctuations and has sufficiently important implications to justify further empirical work for both the United States and other countries.

**PD** March 1989. **TI** The Crime of 1873. **AA** Hoover Institution, Stanford University. **SR** Stanford Hoover Institute Working Paper in Economics: E-89-12; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 19. **PR** no charge. **JE** 042. **KW** Bimetallism. Gold Standard. Free Coinage.

**AB** The U.S. Coinage Act of 1873 eliminated provision for the free coinage of silver. That Act cast the die for a gold standard. The conventional view is that "the Act of 1873 was a

piece of good fortune." This paper indicates that it was the opposite—a mistake that had highly adverse consequences. This is a judgment about 1873, not 1896. By 1896 it was surely too late to undo the damage; Bryan was trying to close the barn door after the horse had been stolen.

**PD** August 1989. **TI** Bimetallism Revisited. **AA** The Hoover Institution, Stanford University. **SR** Stanford Hoover Institute Working Paper in Economics: E-89-24; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 31. **PR** no charge. **JE** 031, 041, 432. **KW** Bimetallism. Gold Standard. Monometallism.

**AB** The near universal adoption of inconvertible paper standards throughout the world has rendered the discussion of specie standards of largely historical interest. That situation may change but, whether it does or not, it seems worth offering an antidote to the conventional view among monetary economists about bimetallism and about the relative merits of gold and silver monometallism. Far from being a thoroughly discredited fallacy, bimetallism has much to recommend it on theoretical, practical, and historical grounds as superior to monometallism, though not to symmetallism, or to a tabular standard.

**Froeb, Luke**

**TI** Do Firms Differ Much?. **AU** Amel, Dean F.; Froeb, Luke.

**Froot, Kenneth A.**

**PD** August 1988. **TI** Buybacks, Exit Bonds and the Optimality of Debt and Liquidity Relief. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 2675; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 33. **PR** \$2.00. **JE** 443, 431, 411. **KW** Debt Relief. Public Debt. Creditor. Developing Countries.

**AB** We compare various forms of market-based debt relief with coordinated debt forgiveness on the part of creditors. These schemes lead to different allocations of resources and levels of debtor and creditor welfare, but all attempt to stimulate debtor investment through reductions in the level of debt. If investment-incentive effects are present, then investment in liquidity-constrained debtors will respond by enough to make a reduction in debt profitable, but not by enough to make the reduction in debt optimal. For these countries the optimal debt-relief package (from the creditors' perspective) will include an infusion of new lending.

**PD** February 1989. **TI** Exchange-Rate Dynamics under Stochastic Regime Shifts: A Unified Approach. **AU** Froot, Kenneth A.; Obstfeld, Maurice. **AA** Froot: Massachusetts Institute of Technology. Obstfeld: International Monetary Fund. **SR** National Bureau of Economic Research Working Paper: 2835; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 18. **PR** \$2.00. **JE** 431, 311. **KW** Brownian Motion. Exchange Rates. Monetary Policy. Currency.

**AB** Techniques of regulated Brownian motion are used to analyze the behavior of the exchange rate when official policy reaction functions are subject to future stochastic changes. We examine exchange rate dynamics in alternative cases where the authorities promise (i) to confine a floating rate within a predetermined range and (ii) to peg the currency once it reaches

a predetermined future level. Similarities between these and several related examples of regime switching are stressed.

**TI** Conditional Mean-Variance Efficiency of the U.S. Stock Market. **AU** Engel, Charles; Frankel, Jeffrey A.; Froot, Kenneth A.; Rodrigues, Anthony P.

**Fuhrer, Jeffrey C.**

**PD** August 1989. **TI** Monetary Policy Rules and the Indicator Properties of Asset Prices. **AU** Fuhrer, Jeffrey C.; Moore, George R. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 89; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 36. **PR** no charge. **JE** 313, 134, 311, 023, 133. **KW** Monetary Policy. Commodity Prices. Term Structure. Inflation. Asset Prices.

**AB** This paper investigates relationships among asset prices and inflation in a compact modern Keynesian model in which the goal of monetary policy is to stabilize the rate of inflation, and the instrument of policy is the federal funds rate. We find that the indicator properties of asset prices the reduced form mapping from the state of the inflation process to asset prices are very sensitive to changes in the structural monetary policy rule. Including the asset prices themselves in the reaction function—targeting the indicators—changes the sense of the indicator properties, so that a state of high and rising inflation is associated with an inverted yield curve, low commodity prices, and a high exchange rate. In addition, targeting the asset prices is tantamount to targeting the real interest rate in this model.

**Fullerton, Don**

**TI** The General Equilibrium Effects of Inflation on Housing Consumption and Investment. **AU** Berkovec, James; Fullerton, Don.

**Gale, William G.**

**PD** November 1988. **TI** Federal Lending and the Market for Credit. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 504; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 38. **PR** \$2.50; checks payable to U.C. Regents. **JE** 315, 311. **KW** Credit Market. Federal Loans. Credit Rationing.

**AB** Federal lending is an important, but unrecognized feature of modern credit markets. This paper analyzes the effects of credit interventions on asymmetric information between borrowers and lender, and allows for market clearing, rationed, or redlined equilibria. Principal results include: unsubsidized credit interventions are neutral; the effectiveness of alternative lending instruments depends on whether rationing occurs; interactions among programs can have perverse, unintended effects; and, even without an informational advantage, the government may enact welfare-improving credit policies under certain conditions.

**PD** April 1989. **TI** Information, Collateral, and Government Intervention in Credit Markets. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 554; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 24. **PR** \$2.50. **JE** 315, 311, 323. **KW** Credit Rationing. Credit Markets. Collateral. Credit Policy.

**AB** This paper analyzes the effects of government intervention in credit markets when lenders use collateral, interest, and the probability of granting a loan as potential screening devices. Equilibria with and without rationing are examined. The principal theme is that policies operate through their effect on the incentive compatibility constraint, which inhibits high-risk borrowers from mimicking the behavior of low-risk borrowers. Any policy that loosens (tightens) the constraint raises (reduces) efficiency. Most government credit programs explicitly attempt to fund investors that cannot obtain private financing. In the model presented here, these subsidies reduce efficiency.

### Gallini, Nancy

**PD** December 1988. **TI** Technology Transfer Under Asymmetric Information. **AU** Gallini, Nancy; Wright, Brian. **AA** Gallini: University of Toronto and Yale Law School. Wright: University of California, Berkeley. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8817; Department of Economics, University of Toronto, Ontario, M5S 1A1, CANADA. **PG** 41. **PR** Gratis (if in stock). **JE** 621, 616, 611, 514. **KW** Licensing. Contracts. Asymmetric Information. Patents.

**AB** Licensing contracts for newly patented innovations are observed to vary along several dimensions, including the form and size of the payment to the inventor (fixed fee versus some output-based royalty), the degree of exclusion, and the division of rents. In this paper we show that the form of the contract can be explained by two problems in technology exchange: Superiority of a licensor's precontractual information about the economic value of the innovation and the fact that sharing this information with the licensee may facilitate imitation. Conditions under which exclusive license contracts (linear and nonlinear), and nonexclusive linear contracts are used to transfer technology are identified.

**PD** December 1988. **TI** Sales and Consumer Lock-In. **AU** Gallini, Nancy; Karp, Larry. **AA** Gallini: University of Toronto and Yale Law School. Karp: University of California, Berkeley. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8815; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 37. **PR** Gratis (if in stock). **JE** 611, 514, 022. **KW** Sales. Monopoly. Prices. Dynamic Model. Price Equilibrium.

**AB** This paper examines the dynamically consistent price path for a new product monopolist, unable to commit to future prices, when consumers must incur set-up costs of adopting the product. We find that set-up costs give rise to a price path with introductory sales: along the path, periods of high prices during which only locked-in or captive customers buy the product alternate with sales (low prices) during which new customers adopt the product. As the stock of captive customers increases over time, sales become less frequent; after the customer base reaches some critical level, no further sales take place. We show that the monopolist may hold a "sleeping patent" in which initial sales of the product are postponed to avoid locking into a high pricing strategy that ignores new customers.

### Galor, Oded

**PD** October 1988. **TI** Long-Run Non-Neutrality of Money: A Dynamic General Equilibrium Analysis. **AU** Galor, Oded; Tsiddon, Daniel. **AA** Galor: Brown University. Tsiddon: The Hebrew University, Jerusalem.

**SR** Brown University Department of Economics Working Paper: 88-19; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 23. **PR** No charge. **JE** 021, 023, 213. **KW** Money Neutrality. Money Supply. General Equilibrium. Stationary Equilibrium. Private Debt.

**AB** This paper analyzes the neutrality of money within a dynamic general equilibrium model characterized by multiplicity of stable stationary equilibria. The study indicates that, in contrast to the prevailing presumption, an unanticipated change in the money supply may affect long-run output despite the existence of rational expectations and perfect information. Via the monetization of private debt, an unanticipated monetary expansion (contraction) may alter the allocation of resources between consumption and investment thereby affecting real output in the short run.

**PD** October 1988. **TI** Dynamic Efficiency of Steady-State Equilibria in an Overlapping-Generations Model with Productive Capital. **AU** Galor, Oded; Ryder, Harl E. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 88-26; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 21. **PR** No charge. **JE** 111, 024. **KW** Overlapping Generations Model. Growth Theory. Capital.

**AB** This paper analyzes dynamic efficiency of steady-state equilibria in an overlapping generations model with productive capital. The study establishes sufficient conditions under which, for any feasible set of well-behaved preferences, stationary over-investment relative to the Golden Rule is ruled out and the economy's steady-state equilibria are therefore dynamically efficient. Furthermore, the implications of these conditions for the feasible ranges of the technological parameters of Cobb-Douglas and CES production functions are analyzed.

**PD** January 1989. **TI** The Impact of Differences in the Levels of Technology on International Labor Migration. **AU** Galor, Oded; Stark, Oded. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 89-4; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 25. **PR** No charge. **JE** 823, 821. **KW** Labor Mobility. Immigration. Capital Markets.

**AB** In this paper we analyze the patterns of international labor migration in a two-country world where one country's production technology is superior to that of the other country, we exploit an overlapping generations model which enables us to trace the relevant dynamic considerations. We find that in the absence of international capital movements labor will migrate from the technologically-inferior to the technologically superior country unless the stationary autarkic equilibrium is characterized by over investment relative to the Golden Rule and the long-run elasticity of the interest rate with respect to the technological level is sufficiently large, in which case migration will be from the technologically superior country.

**PD** February 1989. **TI** Tariff, Income Distribution and Import Levels: A Dynamic General Equilibrium Analysis. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 89-5; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 23. **PR** No charge. **JE** 431, 422. **KW** Imports. Tariffs. Income Distribution.

**AB** This paper analyzes the implications of a tariff for the

level of import. The analysis is conducted within a dynamic general equilibrium framework characterized by overlapping generations. The study analyzes the role, of income redistribution, induced by the imposition of a tariff, in the determination of the time path of import levels. It is shown that the imposition of a tariff in a small economy may result in an increase in the level of import in every time period despite the absence of a change in the terms of trade. The analysis provides sufficient conditions under which short-run as well as long-run import levels increase.

**PD** April 1989. **TI** Labor Endowment and Welfare in an Overlapping-Generations Economy. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 89-15; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 30. **PR** No charge. **JE** 821, 023, 021. **KW** Labor Endowment. Labor Market. Overlapping Generations Model. Employment.

**AB** This paper analyzes the short-run and the long-run welfare implications of a reduction of individuals' labor endowment (e.g., shortening of the work week) within a dynamic general equilibrium model characterized by overlapping generations. The analysis indicates that in a stable stationary equilibrium a permanent reduction of individuals' labor endowment improves stationary welfare only if the long-run elasticity of wage with respect to employment is larger than unitary (negative) and the economy under- (over-) invests relative to the Golden Rule. The old generation at the time of the change is made worse off whereas all other generations during the transition period can be made better off. If transfer payments are feasible, a permanent reduction on individuals' labor endowment may result in Pareto improvement.

**PD** May 1989. **TI** Trade Patterns in a Two-Sector Overlapping-Generations World. **AU** Galor, Oded; Lin, Shoukang. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 89-18; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 21. **PR** No charge. **JE** 411, 111, 023. **KW** International Trade. Growth Model. Overlapping Generations Model.

**AB** This paper establishes dynamic microeconomic foundations for the fundamental propositions of the influential model of international trade theory - the Heckscher-Ohlin model. The paper develops a two-sector overlapping generations model along the lines of the traditional two-sector growth model, establishing sufficient conditions for the existence and the local stability of steady state equilibria. The study analyzes the long-run trade patterns, and their implication for factor returns, within a comprehensive dynamic general equilibrium model of a two-country two-sector overlapping generations world where countries differ in their rates of time preference.

**TI** Growth Via External Public Debt and Capital Controls. **AU** Dellas, Harris; Galor, Oded.

**Garber, Alan M.**

**PD** February 1989. **TI** Predicting Nursing Home Utilization among the High-Risk Elderly. **AU** Garber, Alan M.; MaCurdy, Thomas. **AA** Stanford University. **SR** National Bureau of Economic Research Working Paper: 2843; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** \$2.00. **JE** 918, 913, 921. **KW** Nursing Homes.

Elderly. Aging. Mortality. Health.

**AB** This paper explores the influence of various characteristics on nursing home utilization. It examines a targeted population of elderly individuals whose poor health and lack of social supports were expected to lead to heavy use of long-term care. We develop an empirical framework based on a transition probability model to describe the frequency and duration of nursing home admissions. Using longitudinal data on the high risk elderly enrollees of the National Long-Term Care Demonstration ("Channeling" demonstration), we find that a small set of characteristics distinguish individuals who are likely to be heavy utilizers of nursing homes from low utilizers. The factors associated with a high likelihood of institutionalization are not identical to the health characteristics associated with high mortality;.

**Geanakoplos, John**

**PD** October 1988. **TI** Observability and Optimality. **AU** Geanakoplos, John; Polemarchakis, Herklis. **AA** Geanakoplos: Yale University. Polemarchakis: Columbia University. **SR** Yale Cowles Foundation Discussion Paper: 901; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 21. **PR** \$2.00. **JE** 021, 022. **KW** Utility Function. Asset Market. Equilibrium Allocation.

**AB** Observability of an individual's excess demand function for assets and commodities as all prices and revenue vary suffices in order to recover his von Neumann-Morgenstern utility function. This is generically the case, even when the asset market is incomplete and the cardinal utility indices state dependent, as long as there are at least two commodities traded in spot markets at each state of nature. On the contrary, if the response of individuals' excess demand for assets as prices in spot commodity markets vary is not observable, recoverability fails when the asset market is incomplete. In particular, it is not possible to contradict the claim that the competitive allocation is fully optimal in spite of the incompleteness of the asset market.

**PD** October 1988. **TI** Solving Systems of Simultaneous Equations in Economics. **AU** Geanakoplos, John; Shafer, Wayne. **AA** Geanakoplos: Yale University. Shafer: University of Southern California. **SR** Yale Cowles Foundation Discussion Paper: 902; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 31. **PR** \$2.00. **JE** 213, 022, 021. **KW** Simultaneous Equations. Incomplete Markets. Degree Theory. General Equilibrium.

**AB** We show that there is a broad range of systems of simultaneous equations that arise in economics as descriptions of equilibrium that can be solved in elementary fashion via degree theory. Some of these systems are not susceptible to analysis by standard Brouwer fixed point methods. Two of our applications are to general equilibrium with incomplete markets, and to nonconvex production with noncompetitive pricing rules.

**TI** Liquidity and Bankruptcy with Incomplete Markets: Pure Exchange. **AU** Dubey, Pradeep; Geanakoplos, John.

**Genberg, Hans**

**TI** Exchange Rate Movements and International Interdependence of Stock Markets. **AU** Bhandari, Jagdeep S.; Genberg, Hans.

**Gertler, Paul J.**

**PD** February 1989. **TI** Medicaid and the Cost of Improving Access to Nursing Home Care. **AA** Harvard School of Public Health. **SR** National Bureau of Economic Research Working Paper: 2851; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** \$2.00. **JE** 913, 918, 921. **KW** Medicaid. Nursing Home. Health Costs. Health Care.

**AB** In this paper I show that the Medicaid program can improve the access of financially indigent patients to nursing home care by raising the rate of return paid on Medicaid patients' care, but only at the cost of a lower quality of care. To quantify the policy tradeoff, I derive expressions for the elasticity of access with respect to total Medicaid expenditures and the elasticity of access with respect to quality. These elasticities expressions are complicated by the fact that Medicaid payment formulas are cost based and, therefore, depend on the quality choices of nursing homes.

**Giavazzi, Francesco**

**PD** January 1989. **TI** Can the EMS be Exported? Lessons from Ten Years of Monetary Policy Coordination in Europe. **AU** Giavazzi, Francesco; Giovannini, Alberto. **AA** Giavazzi: Universita di Bologna. Giovannini: Graduate School of Business, Columbia University. **SR** Centre for Economic Policy Research Discussion Paper: 285; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 34. **PR** \$4.00. **JE** 432, 431, 443, 423. **KW** European Monetary System. Expectations. Seigniorage. Exchange Rates.

**AB** This paper addresses the question of whether the European Monetary System can be copied outside Europe. Our answer is negative. The presence of the EC and the dependence of EC institutions on exchange rate stability lend credibility to EMS exchange rate targets in a way that would not be present, say, among the United States, Europe and Japan. The EMS has also reproduced previous experiences of fixed exchange rates by not imposing the exchange rate constraint symmetrically on all member countries: the System has de facto worked as a Deutschmark zone, confirming that the institution of fixed rates per se cannot induce international monetary cooperation.

**PD** January 1989. **TI** The Exchange Rate Question in Europe. **AA** Universita di Bologna. **SR** Centre for Economic Policy Research Discussion Paper: 298; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 24. **PR** \$4.00. **JE** 431, 432. **KW** Exchange Rates. Europe. European Monetary System. Seigniorage.

**AB** This paper reviews the arguments for and against monetary unification in Europe, taking into account the recent shift in emphasis in discussions of exchange rate regimes. It discusses the merits of irrevocably fixed versus flexible exchange rates in the light of the literature on international strategic interactions, where inefficiencies arise from countries' incentives to run beggar-thy-neighbor policies. The long run level of inflation is viewed as determined by the 'credibility' of the monetary authorities: the choice of the exchange rate regime modifies the constraints faced by monetary authorities and may thus modify the equilibrium inflation rate.

**Gibbons, Robert**

**TI** Cheap Talk with Two Audiences. **AU** Farrell, Joseph;

Gibbons, Robert.

**PD** March 1989. **TI** Relative Performance Evaluation for Chief Executive Officers. **AU** Gibbons, Robert; Murphy, Kevin J. **AA** Gibbons: Massachusetts Institute of Technology and NBER. Murphy: University of Rochester. **SR** University of Rochester Managerial Economics Research Center Working Paper: 89-07; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY 14627. **PG** 35. **PR** no charge. **JE** 512, 514, 511. **KW** Executive Compensation. Agency Theory. Industrial Relations. Incentives.

**AB** Measured individual performance often depends on random factors which also affect the performances of other workers in the same firm, industry, or market. In these cases, relative performance evaluation (RPE) can provide incentives while partially insulating workers from the common uncertainty. Basing pay on relative performance, however, generates incentives to sabotage the measured performance of co-workers, to collude with co-workers and shirk and to apply for jobs with inept co-workers. RPE contracts also are less desirable when the output of co-workers is expensive to measure or in the presence of production externalities, as in the case of team production. The purpose of this paper is to review the benefits and costs of RPE and to test for the presence of RPE in one occupation where the benefits plausibly exceed the costs: top-level management.

**PD** April 1989. **TI** Layoffs and Lemons. **AU** Gibbons, Robert; Katz, Lawrence F. **AA** Gibbons: Massachusetts Institute of Technology. Katz: Harvard University. **SR** Princeton Industrial Relations Section Working Paper: 249; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 42. **PR** \$1.50. **JE** 823, 821. **KW** Layoffs. Unemployment. Wages. Asymmetric Information. Displaced Workers.

**AB** In this paper we provide theoretical and empirical analyses of an asymmetric-information model of layoffs in which the current employer is better informed about its workers' abilities than prospective employers are. The key feature of the model is that when firms have discretion with respect to whom to layoff, the market infers that laidoff workers are of low ability. Since no such negative inference should be attached to workers displaced in a plant closing, our model predicts that the post displacement wages of otherwise observationally equivalent workers will be higher for those displaced by plant closings than for those displaced by layoffs.

**Gilbert, Christopher**

**TI** Securitization and Commodity Contingency in International Lending. **AU** Anderson, Ronald; Gilbert, Christopher; Powell, Andrew.

**Gilboa, Itzhak**

**PD** June 1988. **TI** Nash and Correlated Equilibria: Some Complexity Considerations. **AU** Gilboa, Itzhak; Zemel, Eitan. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 777; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 22. **PR** no charge. **JE** 026, 213. **KW** Nash Equilibrium. Game Theory. Correlated Equilibrium.

**AB** This paper deals with the complexity of computing Nash

and correlated equilibria for a finite game given in its normal form. In order to focus on the distinction between "easy" (i.e., polynomial) and "hard" (i.e., NP-hard) problems, we discuss YES/NO problems. However, the natural problems of existence are trivial from an algorithmic point of view: every game is known to have a Nash equilibrium (in mixed strategies)--hence, perforce, a correlated one. We therefore deal with the existence of equilibria satisfying a certain condition, such as: "Given a game  $G$  and a number  $r$ , is there a Nash (correlated) equilibrium of  $G$  in which all players obtain an expected payoff of at least  $r$ ?".

### Gilles, Christian

PD May 1989. TI Bubbles and Charges. AU Gilles, Christian; LeRoy, Stephen F. AA Gilles: Carleton University, Ottawa. LeRoy: University of California, Santa Barbara. SR University of California at Santa Barbara Department of Economics Working Paper: 29-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. PG 28. PR no charge. JE 021. KW Rational Bubbles. Speculation. Commodities. Commodity Space. Exchange Economy. Asset Prices.

AB Consider an Arrow-Debreu economy with  $L(\infty)$  as the commodity space and its dual as the price space. The paper defines the fundamental value of an asset or commodity as the value given to that commodity by the countably additive part of the equilibrium price system. The difference between the price of the asset and its fundamental value is called a rational bubble, and is equal to the value of the commodity under the finitely additive part of the price system (a pure charge). Examples show that rational speculative bubbles may arise even in representative-agent economies. In exchange economies, equilibrium bubbles require the presence of some consumer with infinite patience. This requirement is not necessary in production economies.

### Giovannini, Alberto

TI Can the EMS be Exported? Lessons from Ten Years of Monetary Policy Coordination in Europe. AU Giavazzi, Francesco; Giovannini, Alberto.

PD January 1989. TI Risk Aversion and Intertemporal Substitution in the Capital Asset Pricing Model. AU Giovannini, Alberto; Weil, Philippe. AA Giovannini: Columbia University. Weil: Harvard University. SR National Bureau of Economic Research Working Paper: 2824; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR \$2.00. JE 313, 311, 022. KW Portfolio. Asset Prices. Consumption. Myopic Behavior.

AB When tastes are represented by a class of generalized isoelastic preferences which do not confuse behavior towards risk with attitudes towards intertemporal substitution, the true beta of an asset is, in general, an average of its consumption and market betas. We show that the two parameters measuring risk aversion and intertemporal substitution affect consumption and portfolio allocation decisions in symmetrical ways. A unit elasticity of intertemporal substitution gives rise to myopia in consumption-savings decisions, while a unit coefficient of relative risk aversion gives rise to myopia in portfolio allocation.

### Glassman, Debra A.

PD June 1989. TI A Generalized Model of International

Portfolio Diversification: Evaluating Alternative Specifications. AU Glassman, Debra A.; Riddick, Leigh A. AA Glassman: University of California, Los Angeles. Riddick: Emory University. SR University of California at Los Angeles Department of Economics Working Paper: 565; Department of Economics - UCLA, Los Angeles, CA 90024. PG 42. PR \$2.50. JE 441, 442, 411. KW Portfolio. Diversification. Asset Pricing. International Investment. Capital Markets.

AB In this paper, we synthesize previous theoretical and empirical work on international portfolio diversification by presenting a generalized model and deriving the models in the empirical literature as special cases of it. We then calculate a series of sample portfolios with and without special case assumptions to show how these restrictions systematically bias the estimated portfolio shares. We conclude that a number of puzzling results, such as rejecting mean-variance pricing, may be attributable to model misspecification rather than to the effects of market imperfection.

### Goldfeld, Stephen M.

PD February 1989. TI Input Rationing and Bailouts Under Central Planning. AU Goldfeld, Stephen M.; Quandt, Richard E. AA Princeton University. SR Princeton Financial Research Center Memorandum: 102; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544. PG 35. PR \$3.00. JE 027, 022, 514, 521. KW Rationing. Bailouts. Central Planning. Inputs. Socialism. Firm Behavior.

AB The paper discusses a model of the enterprise under central planning in which an input is rationed. The firm may attempt to protect itself against shortages by purchasing the input at an earlier time (when there is no rationing) but must then incur an inventory cost. A bailout-mechanism is superimposed on this structure according to which the firm may get bailouts from the state when its operating profit is negative, with the amount of the bailout depending on the employment of specialized bailout-seeking labor. The various types of models are compared with respect to their input demands and the solutions analyzed theoretically as well as by numerical experiments.

PD March 1989. TI Output Targets, the Soft Budget Constraint and the Firm Under Central Planning. AU Goldfeld, Stephen M.; Quandt, Richard E. AA Princeton University. SR Princeton Financial Research Center Memorandum: 103; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544. PG 36. PR \$3.00. JE 027, 514, 022. KW Bailouts. Output. Profit Maximization. Socialism.

AB The paper considers the case of an expected profit maximizing firm which has an output target imposed on it by central planners and which may receive (partial) bailouts if its operating profit is negative. The model contains several sources of uncertainty. The paper compares the amounts of input use in the pure bailout case, the pure output target case, the bailout-with-output-target-case and the standard competitive case both theoretically and with numerical experiments.

### Goodfriend, Marvin S.

PD May 1988. TI Financial Deregulation, Monetary Policy, and Central Banking. AU Goodfriend, Marvin S.; King, Robert G. AA Goodfriend: Federal Reserve Bank of Richmond. King: University of Rochester. SR University of

Rochester Center for Economic Research Working Paper: 121; Department of Economics, University of Rochester, Rochester, NY 14627. PG 61. PR no charge. JE 311, 312. KW Monetary Policy. Central Bank. Financial Regulations. Banking. Borrowing.

**AB** The paper analyzes the need for financial regulations in the implementation of central bank policy. It emphasizes that a central bank serves two functions: as monetary authorities, managing high-powered money to influence the price level and real activity; and they engage in regular and emergency lending to financial institutions. The authors term these functions monetary and banking policies, respectively. They emphasize that regulations are not essential for the execution of monetary policy because high-powered money can be managed with open market operations in government bonds. By its very nature, however, banking policy involves a swap of government securities for claims on individual banks. Just as private lenders must restrict and monitor individual borrowers, a central bank must regulate and supervise the institutions that borrow from it.

#### **Gordon, Robert J.**

**TI** The Estimation of Prewar GNP: Methodology and New Evidence. **AU** Balke, Nathan S.; Gordon, Robert J.

**TI** Measurement Issues, the Productivity Slowdown, and the Explosion of Computer Power. **AU** Baily, Martin Neil; Gordon, Robert J.

#### **Greenhalgh, Christine**

**PD** February 1989. **TI** Innovation and the Structure of UK Trade 1951-1981: An Exploration. **AA** St. Peter's College and Institute of Economics and Statistics, Oxford. **SR** Oxford Applied Economics Discussion Paper: 63; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. **PG** 38. **PR** no charge. **JE** 631, 635, 421, 621, 411. **KW** Manufacturing. Service Sector. United Kingdom. Trade Balance. Innovation.

**AB** A popular explanation for the UK's poor trade performance in the post war period is that insufficient attention was paid to the quality of goods offered to consumers. In this paper we explore the role of both price and quality factors in determining the net trade balances of a number of UK manufacturing and service industries. Particular attention is paid to the role of innovation, which is used empirically as a proxy for product improvement. The findings show considerable support for the view that an advanced industrial country like Britain needs to continually upgrade its products to avoid erosion of the domestic and international market shares supplied by home producers.

**PD** April 1989. **TI** The Changing Structure of UK Production, Trade and Employment: An Analysis Using Input Output Tables 1974-84. **AU** Greenhalgh, Christine; Gregory, Mary; Ray, Amit. **AA** Greenhalgh and Ray: Oxford Institute of Economics and Statistics. Gregory: St. Hilda's College. **SR** Oxford Applied Economics Discussion Paper: 70; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. **PG** 34. **PR** no charge. **JE** 821, 222, 824. **KW** Employment. United Kingdom.

**AB** This paper uses the input-output tables for 1974, 1979 and 1984 to explore the causes of changes in employment at sectoral and industry level. We assess the relative importance of rising import penetration, changing producer demands for

factor inputs, and changing consumer demands for goods and services as explanations for the contraction of total private sector employment and the rising share of employment in services. The use of input-output data and methodology permits us to explore both the direct and indirect consequences of changes in final demand.

#### **Gregory, Mary**

**TI** The Changing Structure of UK Production, Trade and Employment: An Analysis Using Input Output Tables 1974-84. **AU** Greenhalgh, Christine; Gregory, Mary; Ray, Amit.

#### **Grogger, Jeffrey**

**PD** March 1989. **TI** The Effects of Criminal Activity on Youth Labor Market Performance. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 14-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 42. **PR** no charge. **JE** 824, 916. **KW** Youth Employment. Crime. Juvenile Delinquents. Wages. Criminal Behavior.

**AB** This paper analyzes the effect of current arrest on the future employment and earnings of young men. An illustrative model is posited in which individuals allocate their time between conventional work and crime in each period. Because future returns to both work and crime are affected by past experience in the respective sector, persistent joblessness is a possible outcome of the model. A unique longitudinal data set, assembled by merging arrest histories and earnings records of a large sample of young male arrestees, is then analyzed to measure the effect of past arrest on current employment and earnings.

#### **Grossman, Gene M.**

**PD** October 1988. **TI** Comparative Advantage and Long-Run Growth. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Princeton Woodrow Wilson School Discussion Paper in Economics: 142; Woodrow Wilson School, Princeton University, Princeton, NJ 08544. **PG** 66. **PR** no charge. **JE** 411, 111, 621, 422. **KW** Comparative Advantage. Long Run Growth. Commercial Policy. Technological Change. R&D. Trade Theory.

**AB** We construct a dynamic, two-country model of trade and growth in which endogenous technological progress results from the profit-maximizing behavior of entrepreneurs. We study the role that the external trading environment and that trade and industrial policies play in the determination of long run growth rates. We find that cross-country differences in efficiency at R&D versus manufacturing (i.e., comparative advantage) bear importantly on the growth effects of economic structure and commercial policies. Our analysis allows for both natural and acquired comparative advantage, and we discuss the primitive determinants of the latter.

**TI** Intellectual Property Rights and North-South Trade. **AU** Chin, Judith C.; Grossman, Gene M.

**PD** March 1989. **TI** Endogenous Product Cycles. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Princeton Woodrow Wilson School Discussion Paper in Economics: 144; Woodrow Wilson School, Princeton University, Princeton, NJ 08544. **PG** 38. **PR** no

charge. **JE** 411, 111, 621. **KW** Product Cycles. Long Run Growth. Technological Change. Innovation. Imitation.

**AB** We construct a model of the product cycle featuring endogenous innovation and endogenous technology transfer. Competitive entrepreneurs in the North expend resources to bring out new products whenever expected present discounted value of future oligopoly profits exceeds current product development costs. Each Northern oligopolist continuously faces the risk that its product will be copied by a Southern imitator, at which time its profit stream will come to an end. In the South, competitive entrepreneurs may devote resources to learning the production processes that have been developed in the North.

**PD** April 1989. **TI** Growth and Welfare in a Small Open Economy. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Princeton Woodrow Wilson School Discussion Paper in Economics: 145; Woodrow Wilson School, Princeton University, Princeton, NJ 08544. **PG** 33. **PR** no charge. **JE** 422, 111, 621, 411. **KW** Long Run Growth. Technological Change. Innovation. Commercial Policy. Economic Growth.

**AB** We construct a model of growth based on endogenous technological change in a small, open economy. Entrepreneurs develop new intermediate products whenever the present value of potential profits exceeds the cost of R&D. Diversity of intermediates contributes to total factor productivity in the production of final goods. The economy produces two such final goods, and trades these at exogenously given world prices. We study the welfare implications of R&D subsidies and commercial policy. There exists an optimal subsidy to R&D that speeds growth relative to the market determined rate. The optimal subsidy achieves the first-best rate of growth, but not the first-best level of welfare.

**PD** August 1989. **TI** Quality Ladders in the Theory of Growth. **AU** Grossman, Gene M.; Helpman, Elhanan. **AA** Grossman: Princeton University. Helpman: Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 32-89; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 38. **PR** no charge. **JE** 111, 621, 022. **KW** Product Quality. R&D. Product Innovation. Technological Progress. Innovation. Research and Development.

**AB** We develop a model of repeated product improvements in a continuum of sectors. Each product follows a stochastic progression up a quality ladder. Progress is not uniform across sectors, so an equilibrium distribution of qualities evolves over time. But the rate of aggregate growth is constant. The growth rate responds to profit incentives in the R&D sector. We explore the welfare properties of our model. Then we relate our approach to an alternative one that views product innovation as a process of generating an ever expanding range of horizontally differentiated products. Finally, we apply the model to issues of resource accumulation and international trade.

### Grossman, Herschel I

**PD** August 1987. **TI** Nominally Denominated Sovereign Debt, Risk Shifting, and Reputation. **AU** Grossman, Herschel I; Van Huyck, John B. **AA** Grossman: Brown University. Van Huyck: Texas A&M University. **SR** Brown University Department of Economics Working Paper: 87-3; Department of

Economics, Brown University, Providence, RI 02912. **PG** 25. **PR** No charge. **JE** 322, 311. **KW** Sovereign Debt. Government Debt. Monetary Policy. Public Policy.

**AB** This paper analyzes a reputational equilibrium in a model in which nominally denominated sovereign debt serves to shift risk associated with the unpredictability of tax revenues from the sovereign to its lenders. The analysis answers the following set of related questions: Why would a sovereign refrain from inflating when faced with servicing a large quantity of nominal debt? If a sovereign does not plan to use inflation to repudiate its nominal debts, why would it want to issue nominal debt in the first place? What are the distinguishing features of those sovereigns who are willing and able to issue nominal debts?.

### Grossman, Herschel I.

**PD** September 1987. **TI** Lending to an Insecure Sovereign. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 87-15; Department of Economics, Brown University, Providence, RI 02912. **PG** 18. **PR** No charge. **JE** 322, 311, 114. **KW** Public Debt. Sovereign Debt. Defense Spending.

**AB** This paper analyzes a reputational equilibrium for sovereign debt in a model in which the sovereign borrows to finance spending for defense against threats to its survival in power. In this model, the amount of sovereign debt and defense spending, the resulting survival probability, and the sovereign's implied discount rate for future consumption are determined simultaneously. The optimal amount of debt and defense spending equates the marginal cost of defense spending in reducing the level of consumption to the marginal benefit of defense spending in increasing the probability of surviving to enjoy future consumption.

**PD** March 1988. **TI** Inflation and Reputation with Generic Policy Preferences. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 87-12; Department of Economics, Brown University, Providence, RI 02912. **PG** 24. **PR** No charge. **JE** 134, 311. **KW** Inflation. Monetary Policy.

**AB** This paper analyzes a reputational equilibrium for inflation under the generic assumption that monetary policy reflects proximate preferences for low expected inflation and positive unexpected inflation. The analysis shows how the equilibrium inflation rate depends on the discount factor that reflects the sovereign's prospects for survival and the private agents' memory process and on the decision interval at which private agents reconsider their expectation of inflation and adjust the behavior that affects the underlying real objectives of monetary policy.

**PD** October 1988. **TI** The Political Economy of War Debts and Inflation. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 88-24; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 23. **PR** No charge. **JE** 041, 114, 023. **KW** Political Economics. War Debt. War. Inflation. Monetary Policy.

**AB** This paper argues that before World War II the desire to maintain a trustworthy reputation for honoring war debts was an important factor in inducing deflationary postwar monetary policies in both the United Kingdom and the United States. The paper then asks why this policy objective did not serve to induce either a deflationary monetary policy or the honoring in full of war debts following World War II. The discussion

focuses on differences in economic and political conditions after World War II, especially the extension of the voting franchise, the increased economic and political power of organized labor, and, perhaps most importantly, the large postwar demands on national resources with which the servicing of World War II debts had to compete.

**PD** August 1989. **TI** A General Equilibrium Model of Insurrections. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 89-23; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 21. **PR** No charge. **JE** 114. **KW** Civil War. Political Insurrection. War. Defense.

**AB** This paper develops a positive theory of insurrections that, in contrast to most existing literature, treats insurrection, and its deterrence or suppression, as economic activities that compete with production and consumption for scarce resources. To account explicitly for resource constraints, the analysis is developed within a general equilibrium framework. Moreover, the analysis is explicitly choice-theoretic. It assumes that the decision to participate in an insurrection depends on the alternative costs and potential payoff to active insurgents and that the policies of the rule reflect the costs and potential benefits to his clientele from deterring or suppressing insurrection.

#### Grossman, Michael

**TI** Pregnancy Resolution as an Indicator of Wantedness and its Impact on the Initiation of Early Prenatal Care. **AU** Joyce, Theodore; Grossman, Michael.

#### Gruber, Martin J.

**TI** The Structure of Spot Rates and Immunization. **AU** Elton, Edwin J.; Gruber, Martin J.; Michaely, Roni.

#### Guidotti, Pablo E.

**TI** Indexation and Maturity of Government Bonds: A Simple Model. **AU** Calvo, Guillermo A.; Guidotti, Pablo E.

#### Gunderson, Morley

**PD** April 1988. **TI** The Effects of Public Policy on Strike Duration. **AU** Gunderson, Morley; Melino, Angelo. **AA** Gunderson: Center for Industrial Relation and University of Toronto. Melino: University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8807; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 36. **PR** Gratis (if in stock). **JE** 831, 833, 822. **KW** Strike Duration. Labor Strikes. Trade Unions. Public Policy.

**AB** Hazard function estimates are utilized to analyze the effect of numerous public policy variables on strike duration, based on 7,546 strikes in Canada between 1967 and 1985. Only the mandatory strike vote substantially reduced conditional strike duration, with automatic reopeners having a smaller effect. However, the policy variables generally had a more favorable effect on reducing strike incidence so that on net they tended to reduce unconditional duration (incidence times conditional duration). Specifically, reduced unconditional duration was associated with the existence of conciliation and requirements for a strike vote, and to a lesser extent with the dues checkoff and wage controls.

#### Gunning, Jan W.

**TI** Fiscal Response to a Temporary Trade Shock: The Aftermath of the Kenyan Coffee Boom. **AU** Bevan, David L.; Collier, Paul; Gunning, Jan W.

#### Gustafsson, Siv

**PD** December 1988. **TI** Income Taxes and Women's Economic Dependency: A Comparison of West Germany and Sweden. **AA** Arbetslivscentrum, Stockholm. **SR** Centre for Economic Policy Research Discussion Paper: 281; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 22. **PR** \$4.00. **JE** 824, 826, 921, 323. **KW** Labor Markets. Public Policy. Labor Supply. Taxes. Tax System.

**AB** Swedish wives' market earnings contribute 39% of the net family earnings of couples living together. German wives contribute 12%. This paper employs Swedish and German micro data on earnings and personal characteristics of couples. After tax earnings are simulated, under both the tax system of the home country and that of the other country. The direct effect of switching tax systems is to increase the share of German wives' market earnings to 17% and decrease that of Swedish wives to 33%. Analysis of variance of the female contribution to family income show that between 50 and 70% of the difference between Sweden and Germany is accounted for by the smaller labor supply of German women.

#### Hagemann, Robert

**TI** The Dynamics of an Aging Population: The Case of Four OECD Countries. **AU** Auerbach, Alan J.; Hagemann, Robert; Kotlikoff, Laurence J.; Nicoletti, Giuseppe.

#### Hajivassiliou, Vassilis

**PD** May 1989. **TI** Do the Secondary Markets Believe in Life after Debt?. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 911; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 40. **PR** \$2.00. **JE** 431, 443, 411. **KW** Debt Crisis. Debt Relief. International Finance.

**AB** This paper employs panel-data econometric techniques to explore the relations between measures of credit worthiness and the debt discounts on the secondary market. It investigates empirically whether the secondary market discounts reflect a history of past repayments problems or whether they anticipate future debt crises. The answer to this question has implications about the desirability of debt relief. The main finding is that the secondary markets do not seem rapidly to absorb economic information, which suggests that they are still in their evolutionary stage and are not yet very efficient. The estimated models are also used to analyze other issues in the international finance literature.

#### Hallett, A. J. Hughes

**TI** Protectionism and the US Trade Deficit: An Empirical Analysis. **AU** Helkie, William L.; Marquez, Jaime R.; Hallett, A. J. Hughes; Hutson, G. J.

#### Haltiwanger, John

**PD** October 1988. **TI** The Impact of Cyclical Demand Movements on Collusive Behavior. **AU** Haltiwanger, John; Harrington, Joseph E. Jr. **AA** Haltiwanger: University of Maryland, College Park. Harrington: Johns Hopkins University. **SR** University of Maryland Department of Economics

Working Paper Series: 89-1; Department of Economics, University of Maryland, College Park, MD 20742. PG 40. PR no charge. JE 611, 131, 133, 022. KW Collusion. Business Cycles. Price Competition. Recession.

AB This study investigates the effect of the business cycle on optimal collusive pricing. The market demand function is specified to follow a cyclical pattern in order to capture two important properties of the business cycle - demand moves over time and firms' expectations on future demand moves over time. Though the incentive to deviate from a collusive agreement is greatest during booms, we find that firms find it most difficult to collude during recessions as the foregone profits from inducing a price war are relatively low. An implication of this effect for pricing behavior is that, holding the level of demand constant, price is lower when demand is declining than when demand is rising. Consistent with previous theoretical work, we find firms price countercyclically for a range of values for the discount factor. However, numerical simulations reveal a greater tendency for firms to price countercyclically during recessions than during booms.

**Hammitt, J. K.**

PD October 1988. TI Measuring and Deterring Illegal Disposal of Hazardous Waste: A Preliminary Assessment. AU Hammitt, J. K.; Reuter, P. H. AA Rand Corporation. SR Rand Report: R-3657; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. PG 85. PR no charge. JE 613, 631, 916, 024. KW Regulations. Hazardous Waste. Waste Disposal. Externalities.

AB Regulations that affect hazardous waste treatment, storage, and disposal have become increasingly stringent, leading to dramatic increases in the financial cost of legal waste disposal. Waste generators and haulers can respond to the changed conditions in several ways--by paying the increased costs of legal on- or off-site disposal; by reducing the amount of waste generated; by recycling; or by disposing illegally to air, water, or soil. This study is a preliminary description of what is known about the extent and nature of illegal disposal, the types of firms that are involved, and the most promising enforcement strategies.

**Hanemann, Michael**

TI A Discrete Choice Contingent Valuation Estimate of the Value of Kenai King Salmon. AU Carson, Richard T.; Hanemann, Michael; Steinberg, Dan.

**Hannan, Timothy H.**

PD May 1989. TI The Impact of Technology Adoption on Market Structure. AU Hannan, Timothy H.; McDowell, John M. AA Hannan: Board of Governors of the Federal Reserve System. McDowell: Arizona State University. SR Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 73; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. PG 15. PR no charge. JE 312, 621, 611. KW Market Structure. Market Concentration. Innovation. Commercial Banks. Technology.

AB This paper examines the relationship between the adoption of automated teller machines (ATMs) by banks and subsequent changes in banking market structure. Among other things, our findings suggest that in the 1970s, banking market concentration tended to increase (decrease) in markets in which

larger (smaller) competitors disproportionately adopted ATMs. Thus we find that banks experienced some success in using ATMs to attract customers from competitors. Failure to find a relationship between the proportion of all market participants adopting ATMs and subsequent levels of concentration suggests that overall, large and small competitors adopted this new technology on a roughly equal basis.

PD June 1989. TI Foundations of the Structure-Conduct-Performance Paradigm in Banking. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 83; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. PG 27. PR no charge. JE 312. KW Banking. Commercial Banks.

AB This paper employs an explicit model of the banking firm to derive formally and thereby assess critically the most commonly tested relationships implied by the structure-conduct-performance paradigm as it applies to the banking industry. These include the relationship between loan rates and market concentration, deposit rates and market concentration, and bank profitability and market concentration. The necessary assumptions and simplifications implicit in past empirical studies and outlined, and suggestions for future empirical implementation of the underlying model are presented.

**Hansen, Gary D.**

TI The Inflation Tax in a Real Business Cycle Model. AU Cooley, Thomas F.; Hansen, Gary D.

**Hansson, Ingemar**

PD September 1988. TI Taxes and Aggregate Labor Supply: A Cross-Country General Equilibrium Study. AU Hansson, Ingemar; Stuart, Charles. AA University of California, Santa Barbara. SR University of California at Santa Barbara Department of Economics Working Paper: 10-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. PG 32. PR no charge. JE 821, 824, 122. KW Labor Supply. Wage Elasticity.

AB Labor supply elasticities used in aggregate models in public finance are typically taken from studies of the behavior of single individuals or households ("disaggregate studies"). Aggregate elasticities may differ from elasticities estimated in disaggregate studies in part because of institutional restrictions that constrain individuals but are endogenous on an aggregate level. We estimate the parameters of a static general equilibrium model of aggregate labor supply using data from a cross section of OECD economies. Estimated aggregate wage elasticities are generally greater than estimates from traditional studies of cross sections of individuals or households.

PD November 1988. TI Malthusian Selection of Preferences. AU Hansson, Ingemar; Stuart, Charles. AA University of California, Santa Barbara. SR University of California at Santa Barbara Department of Economics Working Paper: 22-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. PG 36. PR no charge. JE 111, 023, 022. KW Environment. Growth Models. Intergenerational Model. Consumer Preferences.

AB We study natural selection of preferences. In the very long run, the economy rests in an equilibrium in which (i) 100% of the population have preferences with maximal

biological fitness given resource constraints and (ii) total population equals the carrying capacity of the environment. We derive implications for intergenerational saving and consumption leisure choice using a gold-age growth model with endogenous population. In equilibrium, agents act as if they maximize the undiscounted sum of per-capita felicities of current and future generations. Selection also predicts that preferences and hence work, saving, consumption, and population density should vary across regions in response to environmental differences.

**PD** April 1989. **TI** Social Security as Trade Among Living Generations. **AU** Hansson, Ingemar; Stuart, Charles. **AA** Hansson: Ministry of Finance, Sweden. Stuart: University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 21-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 30. **PR** no charge. **JE** 915, 322. **KW** Social Security. Altruism.

**AB** We study social security legislated endogenously by altruistic, overlapping generations. Starting from a steady-state equilibrium without social security, both generations living in a period can gain from legislation that mandates transfers from young to old in that and all subsequent periods. The social security allocation is Pareto optimal. Later living pairs of generations may lose but do not amend the law.

#### **Hardouvelis, Gikas A.**

**PD** May 1989. **TI** Margin Requirements, Volatility and the Transitory Component of Stock Prices. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 8909; 33 Liberty St., Rm. 905, New York, NY 10045. **PG** 52. **PR** no charge. **JE** 313, 522. **KW** Margin Requirements. Volatility. Speculation. Fads. Equity Markets.

**AB** Higher or rising initial margin requirements in cash equity markets are associated with lower stock price volatility, lower excess volatility, and smaller deviations of stock prices from their fundamental values. The results hold throughout the period since the establishment of official margin requirements in October 1934 and are not very sensitive to the exclusion of the turbulent depression years from the sample. Thus margin requirements seem to be an effective tool in curbing destabilizing speculation.

**TI** Money and Interest Rates: The Effects of Temporal Aggregation and Data Revisions. **AU** Cunningham, Thomas J.; Hardouvelis, Gikas A.

**TI** The Term Structure as a Predictor of Real Economic Activity. **AU** Estrella, Arturo; Hardouvelis, Gikas A.

#### **Hardy, Daniel C.**

**PD** March 1989. **TI** Expected Stock Returns and Real Interest Rates in Equilibrium. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 104; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544. **PG** 43. **PR** \$3.00. **JE** 313, 122, 521, 441, 311. **KW** Stock Returns. Interest Rates. Capital Market. Portfolio.

**AB** The negative correlation between expected excess stock returns and expected inflation is better documented than explained. One possibility is that the excess return on the market portfolio is positively related to the real safe interest

rate, which in turn is negatively affected by expected inflation. An alternative developed here allows for inflation risk; under plausible circumstances the excess return will then be a negative function of the nominal interest rate. Evidence from six countries supports the latter model.

#### **Harrington, Joseph E. Jr**

**TI** The Impact of Cyclical Demand Movements on Collusive Behavior. **AU** Haltiwanger, John; Harrington, Joseph E. Jr.

#### **Hartwick, John M.**

**PD** March 1989. **TI** I. NNP and Economic Depreciation of Natural Resource Stocks and II. The Non-renewable Resource Exploring-Extracting Firm and the  $r\%$  Rule. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 741; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 31. **PR** \$3.00 Canada; \$3.50 U.S. and Foreign. **JE** 721, 221, 022. **KW** National Accounting. Economic Depreciation. Natural Resources.

**AB** I. If an exhaustible resource stock is viewed as a capital good one obtains in the Hotelling model that economic depreciation of the stock (the loss in current value because of depletion) equals (negative) aggregate rent. These results permit us to estimate an extended "capital consumption allowance" for the U.S. economy and to obtain a new NNP value which incorporates the using up of exhaustible resources each year. II. A trivial change in the formulation of Pindyck's classic model of the nonrenewable resource exploring-extracting firm permits one to see that the optimal exploration-extraction program is governed by a pure  $r\%$  rule (Hotelling [1931]). This fact raises difficulties for valuing resource extracting firms by "the Hotelling Valuation Principle".

**PD** September 1989. **TI** I. The Economics of Durable Exhaustible Resources. II. Mining Gold for the Currency and Optimal Real Balances. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 757; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 20. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** 721, 022, 226. **KW** Exhaustible Resources. Durables. Hotelling Rule. Gold. Money. Growth Model.

**AB** I. We contrast the supply condition governing the rate of extraction of durable exhaustible resources such as gold used say in electronics with that governing the rate of extraction of nondurable exhaustible resources such as oil. We find that, in two simple general equilibrium dynamic models, Hotelling's Rule govern supply for nondurable resources, but a distinct asset equilibrium condition governs the supply of durable exhaustible resources. II. A gold mining sector is linked to the neoclassical optimal growth model and mined gold serves as the medium of exchange. Superneutrality obtains asymptotically and in the limit, the rental rate on a unit of individual real balances equals the personal rate of discount.

#### **Hasbrouck, Joel**

**PD** January 1989. **TI** Measuring the Information Content of Stock Trades. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: 506; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006.

**PG** 38. **PR** no charge. **JE** 313, 311, 022. **KW** Trading. Capital Market. Stock Market. Asset Pricing. Information Process.

**AB** Existing microstructure models of markets with asymmetrically informed participants suggest that trades convey information, which leads to price revision following the trade. To give robust empirical content to this notion in a trading environment subject to numerous market imperfections, this paper suggests that the information effect of a trade be measured as the ultimate price impact of the trade innovation. The statistical procedure is a vector autoregression analysis of a system consisting of quote revisions and trades. Applied to a typical NYSE stock, the results indicate that the full price impact of a trade is felt only with a protracted lag, and that the impact is a positive and concave function of the trade size. An analysis of a system consisting of the spread and trades indicates that large trades cause the spread to widen.

### Haveman, Robert

**PD** January 1989. **TI** Disability Status as a Unobservable: Estimates from a Structural Model. **AU** Haveman, Robert; Huang, Fung Mey; Wolfe, Barbara. **AA** University of Wisconsin. **SR** National Bureau of Economic Research Working Paper: 2831; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 42. **PR** \$2.00. **JE** 917, 824. **KW** Handicap. Disability. Labor Force. Employment.

**AB** First, we define true disability and distinguish it from related concepts. We then discuss the importance of an objective and reliable measure of disability for research on the determinants of behavior. Next, we present the specification of our structural model for estimating true disability as a latent variable. Finally, we report the results of our estimation in a simple model of labor force participation, and compare the effect of using the constructed index and a self-reported disability measure on understanding the determinants of behavior and choice.

### Heckman, James J.

**PD** February 1989. **TI** Determining the Impact of Federal Antidiscrimination Policy on the Economic Status of Blacks: A Study of South Carolina. **AU** Heckman, James J.; Payner, Brook S. **AA** Heckman: Yale University. Payner: Citicorp. **SR** National Bureau of Economic Research Working Paper: 2854; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** \$2.00. **JE** 917, 822, 824. **KW** Discrimination. Minorities. Government Policy.

**AB** This paper assesses the contribution of federal antidiscrimination policy to the dramatic improvement of black economic status in manufacturing that occurred in South Carolina in the mid 1960s. Using a unique data source on wages and employment by race and sex in South Carolina we evaluate competing explanations. Human capital stories, supply shift stories and tight labor market stories do not account for the black breakthrough. Our study documents a significant contribution of federal antidiscrimination programs.

**PD** February 1989. **TI** The Impact of Government on the Economic Status of Black Americans. **AA** Yale University. **SR** National Bureau of Economic Research Working Paper: 2860; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** \$2.00. **JE** 917, 824, 921. **KW** Minorities.

Affirmative Action. Employment. Income Distribution. Discrimination. Wages.

**AB** This paper reviews recent evidence on black economic progress. It notes that while relative status increased over the period 1965-1981, absolute differentials in real earnings between blacks and whites widened over this period. The paper goes out to summarize recent studies of the impact of government on the economic status of black Americans. Educational policy has a strong effect. The evidence on affirmative action programs is mixed. There is an intrinsic bias in the methods used toward finding no effect of affirmative action programs. Selection bias effects do not account for more than 10-12% of measured wage growth of black males.

**PD** February 1989. **TI** Choosing Among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case of Manpower Training. **AU** Heckman, James J.; Hotz, V. Joseph. **AA** Heckman: Yale University. Hotz: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 2861; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** \$2.00. **JE** 811. **KW** Training. Manpower. Program Evaluation.

**AB** The recent literature on evaluating manpower training programs demonstrates that alternative nonexperimental estimators of the same program produce an array of estimates of program impact. Missing in all of the recent pessimistic analyses of nonexperimental methods is any systematic discussion of how to choose among competing estimators. This paper explores the value of simple specification tests in selecting an appropriate nonexperimental estimator. A reanalysis of the National Supported Work Demonstration Data previously analyzed by proponents of social experiments reveals that a simple testing procedure eliminates the range of nonexperimental estimators that are at variance with the experimental estimates of program impact.

### Helkie, William L.

**PD** February 1989. **TI** Protectionism and the US Trade Deficit: An Empirical Analysis. **AU** Helkie, William L.; Marquez, Jaime R.; Hallett, A. J. Hughes; Hutson, G. J. **AA** Helkie and Marquez: Board of Governors of the Federal Reserve System. Hallett and Hutson: University of Newcastle upon Tyne. **SR** Centre for Economic Policy Research Discussion Paper: 286; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 55. **PR** \$4.00. **JE** 113, 422, 431, 321, 311. **KW** Protectionism. Tariffs. Policy Coordination. Fiscal Policy. Monetary Policy. Exchange Rates.

**AB** The persistence of large trade and budget imbalances has led to increasing demands for protectionist policies. Despite a substantial theoretical literature there appears to be no empirical literature on the use of tariffs as a macroeconomic policy instrument. This paper fills that gap, using the multicountry econometric model (MCM) in a dynamic framework where full employment is not assured. We simulate the effects of using protectionist policies for solving the major imbalances in five major industrialized countries, while preserving growth, over 1986-92. These policies are contrasted with coordination of fiscal and monetary policies and orchestrated realignment of national currencies.

**PD** March 1989. **TI** U.S. External Adjustment: Progress and Prospects. **AU** Helkie, William L.; Hooper, Peter.

**AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 345; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 31. **PR** no charge. **JE** 431, 132, 131. **KW** External Adjustment. Trade Model. Stochastic Simulations. Forecasting.

**AB** This paper presents an empirical analysis of the progress in U. S. external adjustment through 1988 and prospects for continued adjustment over the years ahead. We consider various model extrapolations of the U. S. external balance with exchange rates and income growth rates held unchanged. Our model, as well as those of other researchers, indicate that the U. S. external balance will narrow somewhat further during 1989, but will begin to widen again thereafter. This view may be overly pessimistic, due to some limitations of the models. In order to assess the credibility of these projections, we consider the issue of model uncertainty and construct error bands around the model projections using stochastic simulation techniques.

### Helliwell, John

**TI** Domestic and Cross-Border Consequences of U. S. Macroeconomic Policies. **AU** Bryant, Ralph C.; Helliwell, John; Hooper, Peter.

### Helpman, Elhanan

**TI** Comparative Advantage and Long-Run Growth. **AU** Grossman, Gene M.; Helpman, Elhanan.

**TI** Endogenous Product Cycles. **AU** Grossman, Gene M.; Helpman, Elhanan.

**TI** Growth and Welfare in a Small Open Economy. **AU** Grossman, Gene M.; Helpman, Elhanan.

**TI** Quality Ladders in the Theory of Growth. **AU** Grossman, Gene M.; Helpman, Elhanan.

### Hendershott, Patric H.

**PD** February 1989. **TI** Integration of Mortgage and Capital Markets and the Accumulation of Residential Capital. **AU** Hendershott, Patric H.; Van Order, Robert. **AA** Hendershott: Ohio State University. Van Order: Federal Home Loan Mortgage Corp. **SR** National Bureau of Economic Research Working Paper: 2847; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** \$2.00. **JE** 315, 932. **KW** Mortgages. Housing. Capital Market. Coupon Rates.

**AB** The securitization of fixed-rate mortgages suggests that the FHA/VA market was fully integrated with capital markets by the early 1980s and that the conventional market moved toward integration during the 1980s. We first estimate equations explaining near-par GNMA prices weekly for the 1981-88 period. The price is then set equal to the new issue price and, based upon the preferred equation, the perfect market retail coupon rate is computed. Next we estimate equations (for three year segments of the 1971-88 period) explaining conventional commitment mortgage coupon rates in terms of current and lagged values of this perfect market coupon rate. Finally, we examine differences between the perfect market and actual coupon rates and compute the impact of these differences on residential capital accumulation.

### Henderson, J. Vernon

**TI** Efficiency Through Decentralization with Product Diversity. **AU** Abdel, Rahman Hesham; Henderson, J. Vernon.

### Hickson, Charles R.

**PD** December 1988. **TI** A New Interpretation of Guilds, Tariffs, and Laissez-Faire. **AU** Hickson, Charles R.; Thompson, Earl A. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 461; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 69. **PR** \$2.50; checks payable to U.C. Regents. **JE** 323, 321, 612, 611, 044. **KW** Monopoly. Guilds. Tariffs. Protectionism. Market Failures.

**AB** This paper theoretically derives and tests a new explanation of historically observed variations in guilds, tariffs and laissez faire policies. The traditional view is that guild and tariff policies have been monopolistic and inefficient, and that the political associations formed to effect such redistributive policies represent a net drain on society's resources. Our view is that guilds and protectionist lobbies, and the corresponding policies of government-sanctioned entry-restrictions and protective tariffs, have existed in legislatively pragmatic states when and only when the policies have been in the collective interest of the members of the state.

**PD** August 1989. **TI** The Historical Efficiency of European Guilds. **AU** Hickson, Charles R.; Thompson, Earl A. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 461A; Department of Economics, UCLA, 2263 Bunche, Los Angeles, CA 90024. **PG** 69. **PR** \$2.50. **JE** 044, 022, 112. **KW** Guilds. Monopoly. Economic Policy. Medieval Europe.

**AB** This paper presents and tests a new interpretation of European guilds and the nature of their policies. The traditional view, from classical economics, is that guilds, at least those of the bureaucratically active, entry-restrictive variety common in late Medieval Europe, were monopolistic and economically inefficient, representing net drains on the society's resources. In contrast, our interpretation is that such guilds were both adopted and eliminated by legislatively pragmatic European states soon after the corresponding changes in economic policy were in the collective interest of the members of the state.

### Hillier, Grant H.

**PD** May 1989. **TI** On the Normalization of Structural Equations: Properties of Direction Estimators. **AA** Monash University. **SR** Monash Department of Econometrics Working Paper: 5/89; Department of Economics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 28. **PR** no charge. **JE** 211. **KW** Direction Estimators. Exact Distributions. Induced Densities. Normalization Rules. Least Squares Estimators.

**AB** In the classical structural equation model only the direction of the vector of coefficients of the endogenous variable is determined. The traditional normalization rule defines the coefficients that are of interest but should not be embodied in the estimation procedure: we show that the properties of the traditionally defined Ordinary Least Squares and Two Stage Least Squares estimators are distorted by their

dependence on the normalization rule. Properly normalized analogues of these estimators are defined and are shown to have essentially similar properties to those of the Limited Information Maximum Likelihood estimator.

### Hines, James R.

**PD** April 1989. **TI** Coming Home to America: Dividend Repatriations by U.S. Multinationals. **AU** Hines, James R.; Hubbard, R. Glenn. **AA** Hines: Princeton University. Hubbard: Columbia University. **SR** Princeton Woodrow Wilson School Discussion Paper in Economics: 146; Woodrow Wilson School, Princeton University, Princeton, NJ 08544. **PG** 50. **PR** no charge. **JE** 323, 442, 521. **KW** Tax Credit. Dividends. Multinationals. Taxes.

**AB** This paper analyzes the financial flows from foreign subsidiaries of American multinational corporations to their parent corporations in the United States. These repatriations are important not only to U.S. investors, who thereby have access to those funds, but also to the U.S. government, which generally does not tax foreign earnings of controlled foreign corporations until they are repatriated. The paper reviews the current tax system as applied to multinational firms, and considers the incentives it creates for various intra-firm financial transactions (in particular, the form of repatriations).

### Hirshleifer, Jack

**PD** August 1989. **TI** Investment Decision Criteria -- Public Decisions. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 571; Department of Economics, 2263 Bunche, Los Angeles, CA 90024. **PG** 10. **PR** \$2.50. **JE** 024, 025, 321. **KW** Discount Rate. Public Investment. Investment. Government Spending. Fiscal Policy.

**AB** Government investment choices may be aimed at satisfying paternalistic or individualistic motivations. Even in the latter case, some adjustment of private market data may be indicated on grounds of market imperfections. The main debates have concerned the appropriate discount rate for evaluating public investment projects. The two polar positions favor, respectively: (i) the marginal opportunity rate in the private sector, versus (ii) a preferentially low rate.

### Hirtle, Beverly

**TI** The Implicit Liabilities of the Pension Benefit Guaranty Corporation. **AU** Estrella, Arturo; Hirtle, Beverly.

### Holland, Elaine

**TI** The Legal and Economic Consequences of Wrongful Termination. **AU** Dertouzos, James N.; Holland, Elaine; Ebener, Patricia.

### Holtz, Eakin Douglas

**PD** October 1988. **TI** Intertemporal Analysis of State and Local Government Spending: Theory and Tests. **AU** Holtz, Eakin Douglas; Rosen, Harvey S. **AA** Holtz-Eakin: Columbia University. Rosen: Princeton University. **SR** John M. Olin Program for the Study of Economic Organization and Public Policy: 32; Department of Economic/Woodrow Wilson School of Public & International Affairs, Princeton University, Princeton, NJ 08544. **PG** 20. **PR** no charge. **JE** 324, 023. **KW** Government Spending. Local Governments. Intertemporal Model.

**AB** A distinguishing feature of much modern

macroeconomics is a focus on intertemporal considerations. In contrast, both theoretical and empirical analyses of state and local government behavior generally assume that all spending during a given period depends only on contemporaneous resources. This paper specifies and tests a model in which state and local spending is generated by intertemporal utility maximization. We find that about 38 percent of such spending is determined by permanent (as opposed to current) resources.

**PD** November 1988. **TI** The "Rationality" of Municipal Capital Spending: Evidence from New Jersey. **AU** Holtz, Eakin Douglas; Rosen, Harvey S. **AA** Holtz-Eakin: Columbia University. Rosen: Princeton University. **SR** John M. Olin Program for the Study of Economic Organization and Public Policy: 33; Department of Economics/Woodrow Wilson School of Public & International Affairs, Princeton University, Princeton, NJ 08544. **PG** 28. **PR** no charge. **JE** 931, 324, 113. **KW** Capital Goods. Public Spending. Decision Theory. Urban Economics.

**AB** Some analysts interpret movements in municipal capital spending as rational reactions to changing economic and demographic conditions. Others attribute it to myopic decision making by politically motivated local officials. In this paper we utilize panel data on capital spending by a sample of New Jersey municipalities during the early 1980's in order to investigate which hypothesis is more consistent with actual spending behavior. We find that, capital spending is governed by different processes in different types of communities.

### Holzer, Harry

**PD** January 1989. **TI** Wages, Employer Costs, and Employee Performance in the Firm. **AA** Michigan State University. **SR** National Bureau of Economic Research Working Paper: 2830; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** \$2.00. **JE** 824, 825, 833. **KW** Adjustment Costs. Productivity. Wage Level. Unions. Employment.

**AB** In this paper I use data from a survey of firms to estimate the effects of a firm's wage level on several measures of its hiring costs and the characteristics and performance of its employees. These measures include the previous experience and current tenure of its employees; subjective productivity scores for these employees; job vacancy rates; perceived ease of hiring qualified workers for the firm; and hours spent hiring and training new workers. In doing so, I distinguish the case of high wages imposed on a firm by unions from that in which the firm might be choosing its wage level in order to maximize its profits. I also provide some rough measures of the extent to which firms offset their high wage costs in each case.

**PD** February 1989. **TI** Employment, Unemployment and Demand Shifts in Local Labor Markets. **AA** Michigan State University. **SR** National Bureau of Economic Research Working Paper: 2858; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** \$2.00. **JE** 824, 821. **KW** Unemployment. Labor Market. Labor Demand. Adjustment Costs.

**AB** This paper analyzes the effects of demand shifts within and between local labor markets on unemployment and employment levels and changes observed in those markets. Between-market demand shifts are measured by the means of sales growth for firms in each market, while within-market shifts are measured by variances in each. The variances are also decomposed into between-industry and within-industry

components. Some firm level evidence on job applicants, training and wage and employment adjustments in growing and declining firms is presented as well.

### Hooker, Sarah A.

**PD** October 1988. **TI** The International Investment Position of the United States. **AA** Rand Corporation. **SR** Rand Report: R-3610; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. **PG** 42. **PR** no charge. **JE** 441, 431, 221, 224. **KW** International Investment. Debtor. Capital Flows.

**AB** This report analyzes the net international investment position of the United States in the years 1983-1986. Using the Department of Commerce framework, which is the full balance sheet net international investment position, this analysis involves a clarification of the term "debtor" and a reevaluation of some components of the net international investment position. In addition to refining the definition of debtor, this report analyzes the components of the international investment position. The report briefly discusses the forces behind the decline in the net international investment position and determines that it should not necessarily be deemed a deterioration because of the positive economic effects of capital inflows.

**PD** July 1989. **TI** A Reconciliation of Flow of Funds and Commerce Department Statistics on U.S. International Transactions and Foreign Investment Position. **AU** Hooker, Sarah A.; Wilson, John F. **AA** Hooker: Board of Governors of the Federal Reserve System. Wilson: University of Michigan and Board of Governor of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 84; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 39 plus tables. **PR** no charge. **JE** 221, 223, 441, 431. **KW** National Income Accounts. Financial Accounts. Balance of Payments. International Investment.

**AB** Both the Commerce Department and Flow of Funds Section of the Federal Reserve Board publish statistics on capital account transactions in the U.S. balance of payments, and on the resulting international investment position. Although these statistics are closely related, the treatment of certain items differs, sometimes leading to the erroneous impression that the United States has two sets of international accounts. This paper provides a complete reconciliation between the Commerce and Federal Reserve statistics. It emphasizes that differences in some data sources, especially for banking institutions, the treatment of international banking facilities, and adjustment of the flow of funds data to be in line with national accounts concepts give rise to these apparent divergences between the two sets of statistics.

### Hooper, Peter

**PD** March 1989. **TI** Macroeconomic Policies, Competitiveness, and U. S. External Adjustment. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 347; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 30. **PR** no charge. **JE** 431, 825, 321, 311, 411. **KW** Productivity. Competitiveness. Labor Costs. Trade Balance. Macroeconomic Policies, Exchange Rates. Depreciation.

**AB** This paper presents an empirical analysis of the

relationships among the U. S. external balance, exchange rates, macroeconomic policies, and longer term trends in relative labor productivity. Movements in the U. S. external balance over the past two decades have been determined to a substantial degree by shifts in U. S. international price and cost competitiveness. Movements in price and cost competitiveness, in turn, have been dominated by swings in nominal exchange rates, which can be explained to a large extent by shifts in fiscal and monetary policies at home and abroad.

**PD** March 1989. **TI** Exchange Rates and U. S. External Adjustment in the Short Run and the Long Run. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 346; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 34. **PR** no charge. **JE** 411, 431, 023. **KW** Trade Balance. Exchange Rates. Purchasing Power Parity. Competitiveness. Labor Costs.

**AB** The objective of this paper attempts to reconcile PPP-based views and model-based views about prospects for U. S. external adjustment in the medium term. Projections based on conventional models of the model-based projections fail to capture longer-run shifts in relative output capacity in response to sustained cost differentials (or deviations from absolute purchasing power parity) across countries.

**TI** U.S. External Adjustment: Progress and Prospects. **AU** Helkie, William L.; Hooper, Peter.

**TI** Domestic and Cross-Border Consequences of U. S. Macroeconomic Policies. **AU** Bryant, Ralph C.; Helliwell, John; Hooper, Peter.

### Horsewood, N.

**TI** Employment and Wage Flexibility in Interwar Britain. **AU** Dimsdale, N. H.; Nickell, Stephen J.; Horsewood, N.

### Hoshi, Takeo

**PD** June 1989. **TI** Corporate Structure, Liquidity and Investment: Evidence from Japanese Industrial Groups. **AU** Hoshi, Takeo; Kashyap, Anil; Scharfstein, David. **AA** Hoshi: University of California, San Diego. Kashyap: Board of Governors of Federal Reserve System. Scharfstein: Massachusetts Institute of Technology. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 82; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. **PG** 39. **PR** no charge. **JE** 521, 522, 314, 312. **KW** Capital Market. Investment. Liquidity Banking. Financial Intermediation.

**AB** This paper presents evidence consistent with the view that information and incentive problems in the capital market affect investment. We come to this conclusion by examining two sets of Japanese firms. The first set have close financial ties to large Japanese banks that serve as their primary source of external finance and are likely to be well informed about the firm. For these bank-affiliated firms, liquidity plays little or no role in determining investment. We find very different results for a second set of firms that do not have close links to a major bank and presumably face greater information problems in their arms-length capital market transactions. For these firms investment is very sensitive to liquidity.

**PD** July 1989. **TI** Bank Monitoring and Investment: Evidence from the Changing Structure of Japanese Corporate Banking Relationships. **AU** Hoshi, Takeo; Kashyap, Anil; Scharfstein, David. **AA** Hoshi: Graduate School of International Relations and Pacific Studies, University of California, San Diego. Kashyap: Federal Reserve Board. Scharfstein: Massachusetts Institute of Technology. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 86; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 41. **PR** no charge. **JE** 312, 313, 522, 521, 613. **KW** Bank Monitoring. Financing Constraints. Capital Market. Regulations.

**AB** This paper presents evidence on the role of banks in monitoring firms. We argue that bank monitoring mitigates information problems in the capital market and present evidence that is consistent with this view. Our results are obtained by studying the investment behavior of a set of Japanese manufacturing firms over a period when deregulation significantly changed these firms' financing options. Initially, all the firms in the sample had close banking ties and we show that their investment was not sensitive to their liquidity. Regulatory reforms created new possibilities to raise money directly from the capital market. We find that the investment of the firms that chose to weaken their bank ties and use this new financing option was much more sensitive to liquidity than the investment of the firms that continued to borrow heavily from banks.

### Hosios, Arthur

**PD** October 1988. **TI** Self-Selection with Renegotiation. **AU** Hosios, Arthur; Peters, Michael. **AA** University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8814; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 37. **PR** Gratis (if in stock). **JE** 022, 026. **KW** Self-selection. Renegotiation. Bargaining. Contracts.

**AB** This paper considers a static allocation problem in which renegotiation is modelled as a 'non-verifiable' bargaining process by which the terms of a contract between an uninformed seller and an informed buyer are modified subsequent to the buyer's initial selection. It is shown that the optimal renegotiation-proof contract array is a piecewise constant function of the agent's type; and that there can be at most a finite number of distinct contracts offered to the buyer that differ by any arbitrary amount from full information efficiency. These properties are consistent with simple contracts observed in practice.

### Hotz, V. Joseph

**TI** Choosing Among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case of Manpower Training. **AU** Heckman, James J.; Hotz, V. Joseph.

### Howard, David H.

**PD** May 1989. **TI** Implications of the U. S. Current Account Deficit. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 350; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 20. **PR** no charge. **JE** 431, 411, 422, 421. **KW** Current

Account. External Debt. Trade Deficit. Exports.

**AB** In this paper, the implications of the U. S. current account deficit and of the consequent buildup in U. S. external debt are examined. The analytical framework for thinking about the U. S. current account is first surveyed, and the results from the empirical literature on the causes of the deficits in the 1980s are then reported. The sustainability of the U. S. external position is discussed next. It is concluded that, at some point, the U. S. trade deficit has to be closed, but that it is conceivable that the U. S. current account balance could remain substantially negative. How the trade gap might be closed is addressed in the final section of the paper.

### Howe, Roger

**TI** On Integer Points in Polyhedra: A Lower Bound. **AU** Barany, Imre; Howe, Roger; Lovasz, Laszlo.

### Huang, Fung Mey

**TI** Disability Status as a Unobservable: Estimates from a Structural Model. **AU** Haveman, Robert; Huang, Fung Mey; Wolfe, Barbara.

### Hubbard, R. Glenn

**TI** Coming Home to America: Dividend Repatriations by U.S. Multinationals. **AU** Hines, James R.; Hubbard, R. Glenn.

### Hutson, G. J.

**TI** Protectionism and the US Trade Deficit: An Empirical Analysis. **AU** Helkie, William L.; Marquez, Jaime R.; Hallett, A. J. Hughes; Hutson, G. J.

### Ikeda, Kiyohiro

**TI** Computational Use of Group Theory in Bifurcation Analysis of Symmetric Structures. **AU** Murota, Kazuo; Ikeda, Kiyohiro.

### Inder, Brett A.

**PD** May 1989. **TI** A New Test for Autocorrelation in the Disturbances of the Dynamic Linear Regression Model. **AA** Monash University. **SR** Monash Department of Econometrics Working Paper: 6/89; Department of Econometrics, Monash University Clayton, Victoria 3168, AUSTRALIA. **PG** 22. **PR** no charge. **JE** 211. **KW** Dynamic Models. Lagged Dependent Variable. Autocorrelation. Point Optimal Tests. Asymptotic Theory. Linear Regression Model.

**AB** This paper considers testing for first order autoregressive errors in the linear regression model with a lagged dependent variable as regressor. A new test is proposed - a modification of the point optimal test which King (1985) applies to the static linear model. A Monte Carlo study of the power of this new test shows it to be vastly superior to existing tests. A method of obtaining critical values for the test is derived using small disturbance asymptotics.

### Insel, Ayso

**PD** May 1989. **TI** Econometric Modelling of the Turkish Financial Sector: (1964-1986). **AU** Insel, Ayso; McKenzie, George. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 8905; Department of Economics, University of

Southampton, Southampton SO9 5NH, ENGLAND. PG 39. PR No charge. JE 311, 322, 312. KW Finance Sector. Portfolios. Turkey. Government Debt. Public Debt. Banking.

AB The aim of this paper is to construct an econometric model of the Turkish sector, and to examine the role of portfolio adjustments in linking the real and monetary sectors. The Barro conjecture that government debt is not net wealth has been tested and rejected. Real financial wealth is defined in the manner suggested by Tobin. It is concluded that a) the banking sector plays a crucial role in real activity and b) Turkish government debt causes crowding out.

### Ito, Takatoshi

TI On Time-Series Properties of Time-Varying Risk Premium in the Yen/Dollar Exchange Market. AU Canova, Fabio; Ito, Takatoshi.

PD August 1988. TI Foreign Exchange Rate Expectations: Micro Survey Data. AA Hitotsubashi University. SR National Bureau of Economic Research Working Paper: 2679; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 43. PR \$2.00. JE 132, 229, 131. KW Expectations. Survey Data. Forecasts. Exchange Rates. Rational Expectations.

AB This paper analyzes the panel data of bi-weekly surveys, conducted by the Japan Center for International Finance, on the Yen/dollar exchange rate expectations of forty-four institutions for two years. There are three major findings in this paper. First, market participants are found to be heterogeneous. There are significant "individual effects" in their expectation formation. Second, many institutions are found to violate the rational expectation hypothesis. Third, forecasts with long horizons showed less yen appreciation than those with short horizons. Cross equation constraints implied by the consistency of the forecast term structure are strongly rejected in the data.

PD August 1988. TI News and the Dollar/Yen Exchange Rate, 1931-1933: The End of the Gold Standard, Imperialism, and the Great Depression. AU Ito, Takatoshi; Okina, Kunio; Teranishi, Juro. AA Ito: University of Minnesota. Okina: Bank of Japan. Teranishi: Hitotsubashi University. SR National Bureau of Economic Research Working Paper: 2683; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 40. PR \$2.00. JE 041, 313, 321. KW Stock Market. Exchange Rates. Depression. Japan. Gold Standard. Fiscal Policy.

AB According to the efficient market hypothesis, news in Tokyo is responsible for the exchange rate changes during the Tokyo market hours, while the U.S. news is responsible for changes in the New York hours. The intra-daily dynamics of the \$/yen exchange rate from December 1931 to November 1933 is analyzed. Japan's decision to go off gold in December 1931 depreciated yen by 30% in a month, mostly in the Tokyo market. During 1932, the yen depreciated another 30%, mainly due to Japan's aggression in China and resulting diplomatic isolation. In 1933, the yen appreciated against the dollar, mainly in the New York market, due to the U.S. decision to go off gold. However, exchange rate volatility and its sensitivity to news declined over the two year period, because of increasing capital controls.

PD March 1989. TI Is the Bank of Japan a Closet Monetarist? Monetary Targeting in Japan, 1978-1988.

AA Hitotsubashi University. SR National Bureau of Economic Research Working Paper: 2879; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 24. PR \$2.00. JE 311, 133, 132. KW Monetary Policy. Japan. Money Growth. Money Supply. AB This paper investigates whether the Bank of Japan has practiced a monetarist rule since 1975. The Bank of Japan (BOJ) published a report in 1975, stating that it would pay close attention to money supply (M2), and in 1978 started announcing quarterly the "forecast" (targets) of monetary (M2) growth rate. Since 1975, the monetary growth rate has gradually declined, and inflation has subsided without causing a major fluctuation in output. This seems to be a successful case of the monetarist experiment. Has the BOJ practiced a monetarist rule, i.e., an announcement and maintenance of the M2 growth target? This paper reveals that it has not.

### Jackman, Richard

TI The Real Effects of Tax-Based Incomes Policies. AU Layard, Richard; Jackman, Richard.

### Jackson, Matthew O.

PD May 1988. TI Equilibrium, Price Formation and the Value of Information in Economies with Privately Informed Agents. AA Northwestern University. SR Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 790; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. PG 30. PR no charge. JE 026, 022. KW Private Information. Risky Asset. Equilibrium Allocation. Demand Functions.

AB In this paper, the allocation of goods and the endogenous acquisition of information are studied in an economy with a finite number of agents. More specifically, an economy is analyzed in which agents first choose to acquire information, at a cost, concerning the return to a risky asset, and then choose demand functions which determine the allocation of assets. Exchange is modeled as a game, permitting agents to act strategically. Equilibria are demonstrated in which the price of the risky asset fully reveals the relevant information of all agents, and yet agents still wish to acquire (costly) information. This resolves a well known paradox.

PD August 1988. TI Full Bayesian Implementation. AA Northwestern University. SR Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 791; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. PG 25. PR no charge. JE 026, 025. KW Asymmetric Information. Exchange Economies. Social Choice.

AB In this paper, full implementation is examined for general information structures, including those in which information is incomplete and symmetric. For a large class of 'economic' environments (including exchange economies), a theorem presents conditions for which a collection of state contingent allocations satisfies if and only if there exists a mechanism whose (Bayesian) Nash equilibria exactly coincide with the given allocations. This extends the previous literature both by completely characterizing fully implementable allocations and by doing so for a substantially larger set of environments. A second theorem shows that with the addition of a no veto power condition, the conditions are sufficient for full implementation in a general class of environments in which there are three or

more agents.

**Jensen, Michael C.**

**PD** March 1989. **TI** Performance Pay and Top-Management Incentives. **AU** Jensen, Michael C.; Murphy, Kevin J. **AA** Jensen: Harvard Business School. Murphy: University of Rochester. **SR** University of Rochester Managerial Economics Research Center Working Paper: 89-08; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY 14627. **PG** 51. **PR** no charge. **JE** 512, 514, 511. **KW** Executive Compensation. Agency Theory. Incentives. Stockholder Wealth. Stock Ownership.

**AB** Our estimates of the pay-performance relation (including pay, options, stockholdings, and dismissal) for chief executive officers indicate CEO wealth changes \$3.25 for every \$1,000 change in shareholder wealth. The incentives generated by stock ownership are large relative to pay and dismissal incentives, but most CEOs hold trivial fractions of their firm's stock and ownership levels have declined over the past 50 years. We hypothesize that public and private political forces impose constraints that reduce the sensitivity of pay to performance by truncating the upper tail of the earnings distribution. Declines in both the pay-performance relation and the level of CEO pay since the 1930s are consistent with this hypothesis.

**Jha, Raghendra**

**PD** July 1989. **TI** The Fischer Equation Controversy: A Reconciliation of Contradictory Results. **AU** Jha, Raghendra; Sahu, Anandi P.; Meyer, Laurence H. **AA** Jha: Delhi School of Economics and Queen's University. Sahu: Oakland University. Meyer: Washington University. **SR** Queen's Institute for Economic Research Discussion Paper: 747; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 16. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** 111, 311, 023. **KW** Fischer Equation. Monetary Growth. Inflation. Expectations. Interest Rate.

**AB** This paper re-examines the alternative theoretical predictions in the Fischer equation literature. Theoretical predictions about the response of nominal interest rates to inflation expectations ranges from a partial to complete and more-than-complete adjustment of the nominal interest rate to anticipated inflation. Using a neoclassical monetary growth model, this study demonstrated how Mundell-Tobin, Fischer, Darby-Feldstein, Nielsen-Gandolfi and Summers effects hold as special cases under specific assumptions about the parameter values of the model; thus suggesting that the magnitude of the response of the nominal interest rate to expected inflation depends on the empirical values of the critical parameters involved.

**Jones, Larry E.**

**TI** Labor Contracts in a Model of Imperfect Competition. **AU** Chari, V. V.; Jones, Larry E.; Manuelli, Rodolfo E.

**Joskow, Paul L.**

**TI** The Diffusion of New Technologies: Evidence from the Electric Utility Industry. **AU** Rose, Nancy L.; Joskow, Paul L.

**Joyce, Theodore**

**PD** January 1989. **TI** Pregnancy Resolution as an Indicator of Wantedness and its Impact on the Initiation of Early Prenatal Care. **AU** Joyce, Theodore; Grossman, Michael. **AA** City University of New York. **SR** National Bureau of Economic Research Working Paper: 2827; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** \$2.00. **JE** 913, 914. **KW** Prenatal Care. Pregnancy. Medical Care. Minorities.

**AB** The study examines the impact of the wantedness of a pregnancy on the demand for early prenatal care. Past attempts to address this question have depended on the self-assessments of women as to the wantedness of their pregnancy and birth. Our approach can be described as a form of revealed preference in which only those pregnancies that are voluntarily terminated by induced abortion are considered to be unwanted. Using a cohort of pregnant women in New York City, we estimate a prenatal care demand function in which we control for the probability of giving birth, given a woman is pregnant. We interpret this control as a measure of wantedness.

**PD** January 1989. **TI** A Time-Series Analysis of Unemployment and Health: The Case of Birth Outcomes in New York City. **AA** Baruch College and National Bureau of Economic Reseach. **SR** National Bureau of Economic Research Working Paper: 2834; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 16. **PR** \$2.00. **JE** 913, 921. **KW** Unemployment. Children. Health. Pregnancy. Birthweight.

**AB** The paper presents an aggregate time-series analysis of unemployment and infant health that improves on previous work in several ways. First, the data is monthly as opposed to annual and pertains to New York City from January 1970 to December 1986. Second, a structural production function is estimated in which the race specific percentage of low birthweight births is the health outcome. Third, because a pregnancy is limited to at most ten months, we can specify a lag length with confidence. Fourth, the data is tested for stationarity and the production function is estimated in levels as well as in deviations from trend. We find no cyclical variation in the percentage of low birthweight births.

**Judd, Kenneth L.**

**PD** February 1989. **TI** Price and Quality in a New Product Monopoly. **AU** Judd, Kenneth L.; Riordan, Michael H. **AA** Judd: Hoover Institution. Riordan: Boston University. **SR** Stanford Hoover Institute Working Paper in Economics: E-89-8; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 38. **PR** no charge. **JE** 611, 022. **KW** Product Quality. Price Signalling. Consumer Behavior. Monopoly. Learning.

**AB** In a signal extraction model of consumer behavior, higher prices signal higher quality products for a new product monopoly, even without cost asymmetries across different qualities. Moreover, higher quality products earn greater expected profits. Where consumers are incompletely informed about production cost, an introductory price signals cost information, while subsequent prices signal quality. Furthermore, the monopolist has an incentive to provide even transient improvements in quality. Finally, the monopolist has a positive incentive to conduct market research about quality, but there is no general case for regulation requiring additional

information acquisition.

#### **Kahn, James A.**

**PD** August 1988. **TI** Moral Hazard, Imperfect Risk-Sharing, and the Behavior of Asset Returns. **AA** University of Rochester. **SR** University of Rochester Center for Economic Research Working Paper: 152; Department of Economics, University of Rochester, Rochester, NY 14627. **PG** 18. **PR** \$3.00. **JE** 313, 311. **KW** Asset Returns. Risk Premium. Moral Hazard. Risk.

**AB** This paper examines the implications of imperfect risk sharing for the behavior of asset returns. The first part of the paper motivates the imperfect risk sharing in a static general equilibrium model with moral hazard. A two period model is then developed, and parameters are chosen to mimic as closely as possible the level and variability of equity and risk free asset returns, as well as the growth rate and variability of per capita consumption. Consideration of risk free rate variability turns out to be crucial in tying down the model's implications. While the model appears unable to fit the facts precisely, it comes considerably closer than previous efforts: For example, the model is consistent with an equity premium in the 3.5 to 4 percent range.

**PD** December 1988. **TI** Why is Production More Volatile than Sales? Theory and Evidence on the Stockout-Avoidance Motive for Inventory-Holding. **AA** University of Rochester. **SR** University of Rochester Center for Economic Research Working Paper: 168; Department of Economics, University of Rochester, Rochester, NY 14627. **PG** 22. **PR** no charge. **JE** 522, 631, 131, 023. **KW** Inventories. Production Volatility. Stockouts. Automobiles.

**AB** This paper develops and tests a model of inventory behavior that focuses on the stockout-avoidance motive. The model allows for both cost and demand uncertainty. Empirical implications are derived and then tested on disaggregated automobile industry data. The data support the basic implications of the model. Evidence on the relative variance of demand and cost shocks suggests that demand shocks are more important.

#### **Kalai, E.**

**PD** August 1988. **TI** On the Order of Eliminating Dominated Strategies. **AU** Kalai, E.; Zemel, Eitan. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 789; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 8. **PR** no charge. **JE** 026. **KW** Bimatrix Games. Zero Sum Games. Dominated Strategies.

**AB** Different orders of eliminating dominated strategies in bimatrix games may yield different reduced games. However, in the case of elimination of strictly dominated strategies, and for the elimination of weakly dominated strategies in zero sum games, the order is irrelevant. This follows from a general theorem about the uniqueness of the reduced game which unifies the above two cases and illustrates other families of games in which the order of elimination is unimportant.

#### **Kambhu, John**

**PD** March 1989. **TI** Regulatory Standards, Noncompliance and Enforcement. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York

Research Paper: 8902; 33 Liberty St., Rm. 905, New York, NY 10045. **PG** Not available. **PR** no charge. **JE** 613, 611, 616, 514. **KW** Regulation. Regulatory Standards. Noncompliance.

**AB** We suppose that a regulated firm can attempt to hide its noncompliance and also challenge penalties for noncompliance. With this contestable view of regulation, we shall analyze the relationship between regulatory standards, enforcement efforts, and compliance with the standards. Regulatory standards are not a free good. Raising a regulatory standard can cause compliance to fall below the level that is attained with a lower standard. Additionally, it is possible that raising penalties can actually cause compliance to fall. Moreover, higher enforcement efforts can also cause compliance to fall.

#### **Kamien, Morton I.**

**PD** June 1988. **TI** Bertrand Competition with Subcontracting. **AU** Kamien, Morton I.; Li, Lode; Samet, Dov. **AA** Kamien and Samet: Northwestern University. Li: Massachusetts Institute of Technology. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 785; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 27. **PR** no charge. **JE** 026, 022. **KW** Nash Equilibrium. Bargaining. Price Competition. Two Stage Game.

**AB** We investigate a two stage game in which in its first stage two firms engage in price competition to supply a market and in the second stage may subcontract production to each other. It is supposed that the firms produce the identical product with the same strictly convex cost function. A firm is obliged to supply the entire quantity demanded at its quoted price. In the event of a tie each firm supplies one-half the quantity demanded at that price.

**PD** October 1988. **TI** The Limits of Monopolization through Acquisition. **AU** Kamien, Morton I.; Zang, Israel. **AA** Kamien: Northwestern University. Zang: Tel Aviv University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 802; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 46. **PR** no charge. **JE** 611, 026, 022. **KW** Homogeneous Product. Monopoly. Noncooperative Games. Takeover.

**AB** We address the question of whether competitive acquisition of firms by their rivals can result in complete or partial monopolization of a homogeneous product industry. This question is modelled in terms of two distinct three-stage noncooperative games. Analysis of subgame perfect pure strategy Nash equilibria of these games discloses that, under general weak assumptions, monopolization of an industry through acquisition is limited to industries with relatively few firms. For industries with a large number of firms, complete monopolization is impossible while partial monopolization is either impossible or limited in scope and can be completely eliminated by prohibiting any owner from acquiring over fifty percent of the firms in the industry.

#### **Kane, Edward J.**

**PD** February 1989. **TI** How Incentive-Incompatible Deposit-Insurance Funds Fail. **AA** Arizona State University. **SR** National Bureau of Economic Research Working Paper:

2836; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR \$2.00. JE 312, 311. KW Banking. Deposit Insurance. Bankruptcy. Incentives. Principal-Agent Theory.

AB An incentive-incompatible deposit insurance fund (IIDIF) is a scheme for guaranteeing deposits at client institutions that deploys defective systems of information collection, client monitoring, and risk management. These defective systems encourage voluntary risk-taking by clients and by managers and politicians responsible for administering the fund. The paper focuses on how principal-agent conflicts and asymmetries in the distribution of information lead to myopic behavior by IIDIF managers and by politicians who appoint and constrain them.

### Karp, Larry

TI Sales and Consumer Lock-In. AU Gallini, Nancy; Karp, Larry.

### Kashyap, Anil

TI Corporate Structure, Liquidity and Investment: Evidence from Japanese Industrial Groups. AU Hoshi, Takeo; Kashyap, Anil; Scharfstein, David.

TI Bank Monitoring and Investment: Evidence from the Changing Structure of Japanese Corporate Banking Relationships. AU Hoshi, Takeo; Kashyap, Anil; Scharfstein, David.

### Katz, Barbara Goody

PD March 1989. TI On the Existence of Franchise Contracts and Some of Their Implications. AU Katz, Barbara Goody; Owen, Joel. AA New York University. SR New York University Salomon Brothers Center Working Paper: 508; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. PG 23. PR no charge. JE 611, 522, 514, 511. KW Franchise. Contracts. Business Investment.

AB In the franchising problem we characterize, the contract offered by the franchisor contains three elements: the sharing rule, the level of national expenditure to be undertaken by the franchisor, and the number of franchised units to be established. To become a franchisee, each agent must pay a joining fee, agree to remit to the franchisor a proportion of the revenue of the franchised units and select a level of effort to apply to these units. The outcome of each franchised unit depends on the decision variables selected by both the franchisor and franchisee as well as on a random element. Under certain conditions, we establish the existence and uniqueness of an optimal franchise contract.

### Katz, Lawrence F.

TI Layoffs and Lemons. AU Gibbons, Robert; Katz, Lawrence F.

### Kehoe, Patrick J.

TI Time Consistency and Policy. AU Chari, V. V.; Kehoe, Patrick J.; Prescott, Edward C.

TI International Coordination of Fiscal Policy in Limiting Economies. AU Chari, V. V.; Kehoe, Patrick J.

TI Sustainable Plans. AU Chari, V. V.; Kehoe, Patrick J.

### Kehoe, Timothy J.

PD March 1989. TI Determinacy of Equilibria in Dynamic Models with Finitely Many Consumers. AU Kehoe, Timothy J.; Levine, David K.; Romer, Paul M. AA Kehoe: Federal Reserve Bank of Minneapolis and University of Minnesota. Levine: University of California, Los Angeles. Romer: University of Chicago. SR Federal Reserve Bank of Minneapolis Staff Report: 118; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55480. PG 29. PR no charge. JE 021. KW Heterogeneity. Dynamic System. Production Economy.

AB We consider a production economy with a finite number of heterogeneous, infinitely lived consumers. We show that, if the economy is smooth enough, equilibria are locally unique for almost all endowments. We do so by converting the infinite-dimensional fixed point problem stated in terms of prices and commodities into a finite-dimensional Negishi problem involving individual weights in a social value function. By adding artificial fixed factors to utility and production functions, we can write the equilibrium conditions equating spending and income for each consumer entirely in terms of time-zero factor endowments and derivatives of the social value function.

### Kennedy, James E.

PD June 1989. TI The Effect of Bayesian Priors on the Moving-Average Representation of Vector Autoregressions. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 79; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. PG 47. PR no charge. JE 211, 132. KW Vector Autoregression. Variance Decomposition. Impulse Response. Simulations. Forecasting.

AB Vector autoregressions have been used widely in recent years both for forecasting and for analyzing economic time series. It has been shown that forecasting performance improves considerably when Bayesian priors are used in estimation. Such priors often are employed in forecasting applications, but rarely when the aim is to examine the relationships between a set of economic time series. The effect of such priors on variance decompositions and impulse responses has received little attention. The results presented in this paper indicate that the messages contained in a given model's VAR can change markedly when a prior is employed that leads to an appreciable improvement in forecast performance.

### Key, Sydney J.

PD April 1989. TI Financial Integration in the European Community. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System International Finance Discussion Paper: 349; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. PG 126. PR no charge. JE 422, 423, 441, 432. KW Internal Market. Financial Integration. International Finance. Europe. Financial Sector.

AB The EC program to complete the internal market is designed to allow the free movement of goods, persons, services, and capital within the community by the target date of December 31, 1992. This paper provides a comprehensive

description and analysis of the EC program for the financial sector, with emphasis on the relationship of this program to overall issues regarding international trade in financial services.

### Kim, In Joon

**PD** March 1989. **TI** The Analytic Valuation of American Puts. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: 511; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 24. **PR** \$4.00. **JE** 313, 311, 213. **KW** Puts. Capital Market. Stock Market. Finance Theory.

**AB** No closed-form solution exists for the valuation of American puts, and numerical methods are used to account for the possibility of premature exercise. By formulating the precise specification of the American put valuation problem, we derive an analytic solution for the American put value. In doing so we clarify what numerical methods attempt to solve and how they are related to the analytic solution. The properties of the optimal exercise boundary and its implications for the analytic solution are explored. The precise specification helps us to develop a computationally efficient technique to implement the analytic solution.

**PD** May 1989. **TI** The Analytic Valuation of American Options on Futures Contracts. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: 515; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 20. **PR** \$4.00. **JE** 715, 213. **KW** Options. Futures Contracts. Agriculture.

**AB** Unlike stock options, American options on futures contracts are subject to early exercise even in the absence of dividend payments from the spot underlying the futures contracts. No analytic solution exists for the valuation of American options on futures contracts, and numerical methods or approximation techniques have been used to account for the possibility of early exercise. By characterizing the properties associated with the optimal exercise boundary, it is possible to formulate the American option valuation problem in economically and mathematically meaningful ways. This enables us to derive an analytic valuation formula for American calls on futures contracts. The precise understanding of the optimal exercise boundary helps us develop a computationally efficient technique to implement the analytic solution.

### Kim, Sung Tai

**PD** March 1989. **TI** The Excess Burden of Lottery Finance. **AU** Kim, Sung Tai; Marshall, John M. **AA** Marshall: University of California, Santa Barbara. Kim: University of California, San Diego. **SR** University of California at Santa Barbara Department of Economics Working Paper: 16-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 34. **PR** no charge. **JE** 024, 022. **KW** Lotteries. Demand Theory. Government Lottery. Consumer Surplus.

**AB** Lotteries redistribute income. Government lotteries also produce revenues and thus are similar to tax-ridden goods. Since lotteries are not ordinary goods, we develop some demand theory for them, based upon Friedman-Savage, non-concave utility. Using a type of duality, we derive measures of welfare burden of unfair lotteries beyond the revenues raised.

Under certain assumptions, the excess burden is constructed by an integration similar to that for consumer surplus. The assumptions are potentially falsifiable. For some lotteries, market data suffice to calculate excess burden.

### Kimball, Miles S.

**PD** August 1988. **TI** Precautionary Saving and the Timing of Taxes. **AU** Kimball, Miles S.; Mankiw, N. Gregory. **AA** Kimball: University of Michigan, Ann Arbor. Mankiw: National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 2680; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** \$2.00. **JE** 023, 321, 921. **KW** Aggregation. Government Debt. Taxes. Consumption. Heterogeneity. Incomplete Markets.

**AB** This paper analyzes the effects of government debt and income taxes on consumption and saving in a world of infinitely-lived households having uncertain and heterogeneous incomes. The special structure of the model allows exact aggregation across households despite incomplete markets. The effects of government debt are shown to be substantial, roughly comparable to those resulting from finite horizons, and crucially dependent on the length of time until the debt is repaid. Also, anticipated changes in taxes are shown to cause anticipated changes in consumption. Finally, an index of fiscal stance is derived.

**PD** February 1989. **TI** Precautionary Saving in the Small and in the Large. **AA** University of Michigan, Ann Arbor. **SR** National Bureau of Economic Research Working Paper: 2848; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** \$2.00. **JE** 022, 026. **KW** Savings. Risk Aversion. Substitution Effect. Optimal Choice.

**AB** The theory of precautionary saving is shown in this paper to be isomorphic to the Arrow-Pratt theory of risk aversion, making possible the application of a large body of knowledge about risk aversion to precautionary saving, and more generally, to the theory of optimal choice under risk. In particular, a measure of the strength of precautionary saving motive analogous to the Arrow-Pratt measure of risk aversion is used to establish a number of new propositions about precautionary saving, and to give a new interpretation of the Dreze-Modigliani substitution effect.

### King, Elizabeth M.

**PD** 1988. **TI** Computing Economic Loss in Cases of Wrongful Death. **AU** King, Elizabeth M.; Smith, James P. **AA** Rand Corporation. **SR** Rand Report: R-3549; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. **PG** 124. **PR** no charge. **JE** 916, 024. **KW** Death. Economic Loss. Litigation. Lawsuits. Tort Cases.

**AB** This report outlines a new method for computing economic loss in cases of wrongful death. The authors use the human capital (or lost economic output) approach because it dominates actual litigation. In this conceptual model, economic loss is the value of the decedent's lost future productivity, market and nonmarket. The methodology includes seven elements: (1) base-year incomes, (2) salary growth, (3) worklife discounts, (4) nonmarket loss, (5) personal consumption offset, (6) taxes, and (7) discount rates. The methodology can be applied in a wide range of tort cases

besides wrongful death.

**PD** 1988. **TI** Economic Loss and Compensation in Aviation Accidents. **AU** King, Elizabeth M.; Smith, James P. **AA** Rand Corporation. **SR** Rand Report: R-3551; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. **PG** 126. **PR** no charge. **JE** 916, 024. **KW** Lawsuits. Tort Cases. Aviation. Litigation.

**AB** This report considers wrongful death litigation resulting from aviation accidents. It compares benchmark measures of economic loss and loss to survivors with the compensation that beneficiaries actually received. The findings indicate that for the years under study, the tort system did not fully compensate survivors for the losses they suffered from air accidents; similarly harmed individuals were not treated the same; compensation paid through the tort system does not significantly add to safety incentives; and compensation and recovery rates have risen dramatically over the years under study.

**PD** 1988. **TI** Dispute Resolution following Airplane Crashes. **AU** King, Elizabeth M.; Smith, James P. **AA** The Rand Corporation. **SR** Rand Report: R-3585; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. **PG** 56. **PR** no charge. **JE** 916, 024. **KW** Airlines. Tort Cases. Litigation. Lawsuits. Aviation.

**AB** This report summarizes results of legal actions that claimants pursued to recover their losses in major aviation accidents in particular, it attempts to determine why some cases settle early and others do not. The authors describe the elements that distinguish air crash litigation. They discuss the simple correlation between economic loss suffered and litigation process pursued, the theory behind the empirical models, and the operational definition of the empirical variables.

### King, Maxwell L.

**PD** January 1989. **TI** Transformation for an Exact Goodness-of-fit Test of Structural Change in the Linear Regression Model. **AU** King, Maxwell L.; Edwards, Phillip M. **AA** Monash University. **SR** Monash Department of Econometrics Working Paper: 2/89; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 15. **PR** no charge. **JE** 211. **KW** Linear Regression. Structural Change. Recursive Residuals. Money Demand. Regression Model.

**AB** This paper considers testing for structural change of unknown form in the linear regression model as a problem of testing for goodness-of-fit. Transformations of recursive (or other LUS) residuals that reduce the problem to one of testing independently distributed uniform variables are presented. Exact empirical distribution function tests can then be applied without having to estimate unknown parameters. The tests are illustrated by their application to a money demand model.

**TI** A Beta-Optimal Test of the Equicorrelation Coefficient. **AU** Bhatti, Muhammad I.; King, Maxwell L.

### King, Robert G.

**TI** Stochastic Trends and Economic Fluctuations. **AU** Plosser, Charles; King, Robert G.; Stock, James; Watson, Mark.

**TI** Financial Deregulation, Monetary Policy, and Central

Banking. **AU** Goodfriend, Marvin S.; King, Robert G.

### Kipnis, Victor

**PD** June 1989. **TI** Evaluating the Impact of Exploratory Procedures in Regression Prediction: A Pseudosample Approach. **AA** University of Southern California. **SR** University of Southern California Modelling Research Group Working Paper: M8909; Department of Economics, University of Southern California, University Park, Los Angeles, CA 90089-0152. **PG** 27. **PR** no charge. **JE** 211, 212. **KW** Regression Analysis. Bootstrap. Exploratory Analysis.

**AB** The paper concentrates on the evaluation of the impact of exploratory analysis for selecting the "best" predictor with respect to the mean squared error of prediction (MSEP). The very selection process distorts the distribution of convention MSEP estimators and, in particular, leads to their substantial overoptimism. To allow for the selection effect, it is suggested to construct a pseudomodel for generating bootstrap-like pseudo-samples and to apply to them the same selection procedure that is used for the original data. As is demonstrated by the results of several simulation experiments, the suggested approach can be used not only for assessing existing procedures, but for creating new better model building procedures.

**PD** June 1989. **TI** Model Selection and Prediction Assessment in Regression Analysis. **AA** University of Southern California. **SR** University of Southern California Modelling Research Group Working Paper: M8910; Department of Economics, University of Southern California, University Park, Los Angeles, CA 90089-0152. **PG** 27. **PR** no charge. **JE** 132, 211. **KW** Prediction. Regression Model. Bootstrap. Simulation Model. Model Selection.

**AB** The problem of estimating the predictive ability of a model selected among a class of potential regression models is considered. The theory behind traditional estimators is not valid when model selection and estimation are from the same data. The very selection process affects the distribution of those estimators and leads to applying the same selection procedure to bootstrap like pseudosamples as was used for the original data is suggested. Simulation results comparing the estimators for the MSEP provided by this method with conventional estimators are described. It is also shown that the presented method may help in finding a good prediction equation.

### Kornhauser, Lewis A.

**PD** September 1989. **TI** Apportioning Damages Among Potentially Insolvent Actors. **AU** Kornhauser, Lewis A.; Revesz, Richard L. **AA** New York University. **SR** New York University Economic Research Reports: 89-22; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 105. **PR** none. **JE** 722, 916, 024. **KW** Insolvency. Pollution. Liability Rules. Law. Damages. Social Welfare.

**AB** This paper studies the relative social welfare of rules for imposing liability and apportioning damages among potentially insolvent actors. In the model, each of two actors chooses an input level that yields private benefits but imposes an external cost, the size of which depends on the input choices of both actors. Social welfare is the sum of private benefits less the external cost. For each of three legal rules-negligence with

joint and several liability (with contribution), strict liability with joint and several liability (with contribution) and strict liability with non-joint, several only liability--we study how the equilibria of the game vary with the initial solvencies of the parties.

### Kotlikoff, Laurence J.

**TI** The Dynamics of an Aging Population: The Case of Four OECD Countries. **AU** Auerbach, Alan J.; Hagemann, Robert; Kotlikoff, Laurence J.; Nicoletti, Giuseppe.

**TI** The Dynamics of an Aging Population: The Case of Four OECD Countries. **AU** Auerbach, Alan J.; Hagemann, Robert; Kotlikoff, Laurence J.; Nicoletti, Giuseppe.

**PD** February 1989. **TI** From Deficit Delusion to the Fiscal Balance Rule: Looking for an Economically Meaningful Way to Assess Fiscal Policy. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 2841; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** \$2.00. **JE** 322, 321. **KW** Fiscal Policy. Budget Deficit. Government Policy. Budget Constraint. Intertemporal Model.

**AB** Notwithstanding its widespread use as a measure of fiscal policy, the government deficit is not a well-defined concept from the perspective of neoclassical macroeconomics. This paper demonstrates the arbitrary nature of government deficits. The argument that the deficit is not well-defined is first framed in a simple certainty model with nondistortionary policies, and then in settings with uncertain policy, distortionary policy, and liquidity constraints. As an alternative to economically arbitrary deficits, the paper indicates that the "Fiscal Balance Rule" is one norm for measuring whether current policy will place a large or smaller burden on future generations than it does on current generations. The Fiscal Balance Rule is based on the economy's intertemporal budget constraint and appears to underlie actual attempts to run tight fiscal policy.

### Krelove, R.

**PD** December 1988. **TI** Do Local Governments use their Tax Bases Efficiently?. **AA** University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8820; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 34. **PR** Gratis (if in stock). **JE** 324, 931. **KW** Taxes. Public Goods. Government Spending. Urban Economics. Public Policy.

**AB** This paper analyzes an economy with multiple governments and with mobility of individuals across jurisdictions, where each government is constrained to raise revenue for public expenditures using distortionary taxes. A government is said to be competitive if the total benefits and costs of its decisions, including the excess burden, is perceived to be internalized. The competitive equilibrium allocations are not constrained efficient, in general: there exists another set of distortionary taxes and public expenditures such that, when private sector changes to maintain equilibrium, all individuals in the economy are better off. Thus competitive, decentralized decision making does not lead to an efficient use of the available tax instruments.

**PD** December 1988. **TI** Competitive Tax Theory in Open Economies: Constrained Inefficiency and a Pigouvian Remedy. **AA** University of Toronto. **SR** University of Toronto

Institute for Policy Analysis Working Paper: 8818; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 37. **PR** Gratis (if in stock). **JE** 324, 322, 024. **KW** Distortionary Taxes. Public Expenditures. Competitive Equilibrium. Market Failure.

**AB** This paper analyzes an economy with multiple governments, where each is constrained to raise revenue for public expenditures using distortionary taxes on a directly mobile tax base. A government is said to be competitive if the total costs of its decisions, including the excess burden, is internalized. The competitive equilibria are not constrained efficient in general: there is another set of distortionary taxes and associated public expenditures for which all individuals in the economy are better off. It is shown that the source of the failure can be interpreted as a missing market, and the form of the best decentralized remedy is derived.

**PD** December 1988. **TI** The Theory of Equalization Payments Reconsidered. **AA** University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8819; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 40. **PR** Gratis (if in stock). **JE** 324, 931, 024. **KW** Migration. Tax Base. Mobility. Taxes. Local Governments. Government. Public Transfers.

**AB** This analysis re-investigates the efficiency rationale for a system of equalizing transfers in a general equilibrium model of a federal economy with perfect mobility of individuals among the constituent jurisdictions. It is shown that the previous rationale rests upon two distinct types of myopia in local communities' beliefs. When this myopia is removed, the optimal allocation is an equilibrium when it is attainable in the non-cooperative game with rent taxation. At this equilibrium some part of a community's tax is incident upon nonresidents; no local tax structure that restricts the tax base to residents can attain the optimum. Finally, the optimistic result is extended to a competitive solution concept in which each community maximizes after-tax land rent, taking the utility level of its residents as parametric.

**PD** January 1989. **TI** Bringing Back the Entrepreneurs Won't Help: A Comment on the Tiebout Model. **AA** University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8901; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 21. **PR** Gratis (if in stock). **JE** 931, 323, 614. **KW** Tiebout Equilibrium. Public Goods. Government Spending. Housing.

**AB** Henderson (1985) argues that equilibria in a multiple jurisdiction model with competitive, entrepreneurial governments that are restricted to raising revenue for local public expenditures with distortionary taxes are constrained efficient. It is shown that if the own substitution effect of the demand for housing is not zero the equilibrium is not in fact constrained efficient. Hence independent decentralized behavior of local governments is not in general consistent with the efficient use of the available tax instruments.

### Krieger, Reva

**PD** June 1989. **TI** Sectoral and Aggregate Shocks to Industrial Output in Germany, Japan, and Canada. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economic Discussion Series: 75; C/O Jeffrey C. Fuhrer, Mail

Stop 61, Federal Reserve Board, Washington, D.C. 20551. PG 43. PR no charge. JE 131, 133, 023, 122. KW Business Cycles. Technology. Economic Fluctuations. Output.

AB A class of real business cycle models suggests that sectoral shocks to technology or to demand can explain aggregate fluctuations in output and employment. This paper focuses on the contribution of industry specific shocks that are correlated across countries to output fluctuations at both the industry and aggregate level. Shocks which initially affect specific industries can induce aggregate fluctuations not only because national output is the sum of output in various industries, but also because of feedback across industries.

### Krishna, Kala

PD February 1989. TI The Case of the Vanishing Revenues: Auction Quotas with Monopoly. AA Harvard University. SR National Bureau of Economic Research Working Paper: 2840; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 28. PR \$2.00. JE 422, 431, 323, 411. KW Monopoly. Quotas. Auctions. Licenses.

AB This paper examines the effects of auctioning quota licenses when monopoly power exists. With a foreign monopoly and domestic competition the sales of licenses will never raise any revenue if domestic and foreign markets are segmented. More surprisingly, the inability to raise revenue is shown to persist even when partial or perfect arbitrage across markets is possible, as long as the quota is not too far from the free trade import level. In contrast, when there is a home monopoly and foreign competition, the price of a quota license can be positive so that selling licenses can dominate giving them away.

### Krueger, Alan B.

PD September 1988. TI Moral Hazard in Workers' Compensation Insurance. AA Princeton University and National Bureau of Economic Research. SR John M. Olin Program for the Study of Economic Organization and Public Policy: 31; Department of Economics/Woodrow Wilson School of Public & International Affairs, Princeton University, Princeton, NJ 08544. PG 30. PR no charge. JE 822. KW Workmen's Compensation. Unemployment Insurance. Labor Force.

AB This paper uses longitudinal CPS data on a large sample of workers to estimate the determinants of participation in state workers' compensation programs in the United States. The principal finding is that higher workers' compensation benefits are associated with greater participation in the workers' compensation program, after allowing for worker characteristics, state dummy variables and other aspects of the workers' compensation law. Moreover, this result holds for both manufacturing and nonmanufacturing workers. Workers' compensation benefits, however, have an insignificant effect on program participation for the sample of women.

TI Why do World War II Veterans Earn More Than Nonveterans. AU Angrist, Joshua D.; Krueger, Alan B.

TI Why Do World War II Veterans Earn More Than Nonveterans?. AU Angrist, Joshua D.; Krueger, Alan B.

PD June 1989. TI The Effect of Social Security on Labor Supply: A Cohort Analysis of the Notch Generation. AU Krueger, Alan B.; Pischke, Jorn Steffen. AA Krueger:

Princeton University and National Bureau of Economic Research. Pischke: Princeton University. SR Princeton Industrial Relations Section Working Paper: 255; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. PG 45. PR \$1.50. JE 822, 813, 915, 921. KW Social Security. Labor Supply. Income Effect. Wealth.

AB This paper uses aggregate birth year/calendar year level data derived from the Current Population Survey (CPS) to estimate the effect of Social Security wealth on the labor supply of older men in the 1970s and 1980s. The analysis focuses on the 1977 amendments to the Social Security Act which lead to a substantial, unanticipated differential in benefits for otherwise identical individuals depending on whether they were born before or after 1977. There are two principal differences between the present analysis and the previous literature. First, this paper uses time series variations in benefit levels to estimate the relationship between benefits and labor supply in an era when real benefits were falling for new recipients. Second, variation in benefit levels across cohorts is used to estimate the relationship between benefits and labor supply.

### Kuester, Kathleen A.

TI Some Red Flags Concerning Market Value Accounting. AU Berger, Allen N.; Kuester, Kathleen A.; O'Brien, James M.

### Kupiec, Paul H.

PD May 1989. TI Microeconomic Sources of Beta Risk Instability. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 69; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. PG 37. PR no charge. JE 521, 522. KW Risk. Business Investment. Business Finance. Equity.

AB A model of firm CAPM beta risk is developed which identifies microeconomic sources of risk instability. The model is novel because it provides an econometric equity return specification which explicitly includes firm specific production characteristics. Equity returns exhibit time varying beta risk as a consequence of a firm's optimal response to its dynamic business environment. The model is evaluated at the firm level using the nonnested model selection techniques proposed by Davidson and MacKinnon. The statistical results generally support the proposed model of beta risk.

### Kurz, Mordecai

PD March 1989. TI Game Theory and Public Economics. AA Stanford University. SR Stanford Institute for Mathematical Studies in the Social Sciences (Economic Series) Technical Report: 541; IMSSS, Encina Hall, Fourth Floor, Stanford University, Stanford, CA 94305. PG 68. PR \$4.00. JE 021, 022, 026. KW Public Goods. Lindahl Equilibrium. Shapley Value. Public Economics.

AB The paper reviews recent developments in public economics and the use of game theory in these developments. The paper examines in detail the core and Shapley Value of public goods economies. Special attention is paid to the interpretation of replica or "large" economies with public goods and alternative research strategies to study them.

PD March 1989. TI Bounded Ability of Agents to Learn the Equilibrium Price Process of a Complex Economy.

**AA** Stanford University. **SR** Stanford Institute for Mathematical Studies in the Social Sciences (Economic Series) Technical Report: 540; IMSSS, Encina Hall, Fourth Floor, Stanford University, Stanford, CA 94305. **PG** 40. **PR** \$4.00. **JE** 022, 026. **KW** Rational Expectations Equilibrium. Stochastic Processes. Learning Models. Bayesian Learning. Incomplete Markets.

**AB** In general stochastic economy with incomplete market system for contingent claims and with private information, a rational expectations equilibrium requires agents to know the stochastic process of prices. The paper questions the ability of agents to learn such a process. A very general model is formulated in which agents are assumed to select a rational learning procedure. "Learning a stochastic process" is defined by the requirement that the learned conditional distribution of future events given the observed data converges to the true conditional distribution. It is then proved that in a complex economy agents cannot learn the process. Complexity of an economy is defined in terms of the ability of agents to use the learned models to explain past events.

### **Kuttner, Kenneth**

**TI** Money, Income and Prices after the 1980s. **AU** Friedman, Benjamin; Kuttner, Kenneth.

### **Kwast, Myron L.**

**TI** Are Real Estate Specializing Depositories Viable? The Evidence from Commercial Banks. **AU** Eisenbeis, Robert A.; Kwast, Myron L.

### **Kynch, Jocelyn**

**PD** April 1989. **TI** Wasted Cultivators and Stunted Girls: Variations in Nutritional Status in a North Indian Village. **AU** Kynch, Jocelyn; Maguire, Mike. **AA** Kynch: Catherine's College and Oxford Institute of Economics and Statistics. Maguire: University of Wales, College of Cardiff. **SR** Oxford Applied Economics Discussion Paper: 69; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. **PG** 33. **PR** no charge. **JE** 914, 913, 921, 941. **KW** India. Rural Economics. Nutrition. Public Health.

**AB** Palanpur is a village in western Uttar Pradesh. Economic surveys had been conducted there in 1958, 1963 and 1974-5. The nutritional study, consisting of a pilot in February 1984, and a full survey. Main tables show (a) deaths in the population 1958-63, 1963-74/5, 1974/5-1983/4 by sex and age groups; (b) weight-for-height by age and sex, and by relationship to head of household; (c) weight-for-age by sex for children aged 0-6 years. Girls aged 0-6 years were more frequently malnourished (stunted) than boys of the same age. The head of household was often the most wasted person in his household.

### **Layard, Richard**

**PD** March 1989. **TI** The Thatcher Miracle. **AU** Layard, Richard; Nickell, Stephen J. **AA** Layard: London School of Economics. Nickell: London School of Economics and Institute of Economics and Statistics, Oxford. **SR** London School of Economics Centre for Labour Economics Discussion Paper: 343; Centre for Labour Economics, London School of Economics, Houghton Street, London WC2A 2AE, U.K. **PG** 71. **PR** no charge. **JE** 825, 824, 831, 811, 921. **KW** Productivity. Unemployment. Trade Unions. Manpower

Training. Human Capital.

**AB** Since 1979 productivity growth in Britain has improved markedly compared with Europe. This is because managers have regained control over work arrangements. The turnaround in productivity growth has two main causes. The British economy was subjected to a far more severe contraction of demand in 1980-81 than any other country. This led to a new realism, which was sustained by the legal changes in trade union power. Since 1979 there has been a worsening in the trade-off between unemployment and inflation. The poor unemployment/inflation trade-off is due to the neglect of skill training and education (causing skill shortages), and to the buildup of long term unemployment (which does little to restrain inflation).

**PD** April 1989. **TI** The Real Effects of Tax-Based Incomes Policies. **AU** Layard, Richard; Jackman, Richard. **AA** Centre for Labour Economics, London School of Economics. **SR** London School of Economics Centre for Labour Economics Discussion Paper: 341; Centre for Labour Economics, London School of Economics, Houghton Street, London WC2A 2AE, U.K. **PG** 22. **PR** no charge. **JE** 321, 822, 824, 024. **KW** Unemployment. Collective Bargaining. Labor Supply. Efficiency Wages.

**AB** We show how (in the context of a steady inflation rate) TIP reduces the NAIRU. This is so in a one sector world of involuntary unemployment, based on efficiency wages or decentralized union bargaining. It also holds in a two sector world in which there is a secondary market clearing sector, and here the proportional effect on unemployment will be larger than in a one sector world provided the labor supply to the secondary sector is sufficiently high. The most obvious problem with TIP is its effect on worker effort. We show, however, that even allowing for this, TIP will raise social welfare provided the elasticity of effort with respect to wages is sufficiently low.

### **Lazear, Edward P.**

**PD** March 1989. **TI** Pensions and Deferred Benefits as Strategic Compensation. **AA** Hoover Institution and University of Chicago. **SR** Stanford Hoover Institute Working Paper in Economics: E-89-9; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 33. **PR** no charge. **JE** 824, 821, 022, 921. **KW** Pensions. Incentives. Severance Pay. Stock Options. Turnover Rate. Deferred Compensation.

**AB** Until recently, pensions and deferred compensation were thought of as nothing more than tax-free savings accounts. Recent work has embedded pensions in the framework of optimal compensation schemes that induce workers to behave in certain ways. Pensions can affect worker turnover and deferred compensation in general affects worker effort. Still, the labor economist's view of pensions has much in common with the finance view. In particular, most pension formulas present workers with securities that look like options, the value of which depends on exercise time. It is only this view that can reconcile the tendency for turnover rates to fall as vesting approaches, even though there has been no change in the naive valuation of pension accrual.

**PD** May 1989. **TI** Economic Approaches to the Psychology of Organizations. **AA** Hoover Institution and University of Chicago. **SR** Stanford Hoover Institute

Working Paper in Economics: E-89-15; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. PG 40. PR no charge. JE 824, 821, 022. KW Incentives. Bonuses. Promotions. Wages.

**AB** Many questions that intrigue economists, psychologists, and sociologists until recently had been addressed only by institutional economists. These issues, which include mandatory retirement, large, discontinuous wage jumps at promotions, pay compression, tenure and up-or-out promotion rules, have been analyzed in the recent literature with positive results. Economic insight can be extended to questions that have been viewed as primarily psychological, or at least have been conceded to the industrial psychologist. These topics include the timing and frequency of raises, worker evaluations, and promotions; the effects of peer pressure; the choice between bonuses and penalties; cognitive dissonance; the virtues of pay versus non-pecuniary motivators; and what has come to be called bounded rationality.

#### **Leamer, Edward E.**

**PD** April 1989. **TI** Bayesian Elicitation Diagnostics. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 555; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 50. **PR** \$2.50. **JE** 211. **KW** Diagnostics. Estimation. Linear Regression. Prior Distribution.

**AB** The subject of this paper is elicitation diagnostics that indicate if a prior distribution has to be measured accurately. An elicitation diagnostic forms a question that compares the information in the prior distribution with the information in the given sample. One elicitation diagnostic identifies a family of prior distributions that are so diffuse that they are practically equivalent to the "completely" diffuse prior. Elicitation diagnostics for the normal linear regression model are reported.

**PD** April 1989. **TI** Planning, Criticism and Revision. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 553; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 47. **PR** \$2.50. **JE** 211. **KW** Diagnostics. Data Analysis. Estimation.

**AB** This paper presents a more complete theory of data analysis which allows for changes in the state of mind of the observer and also for approximations that limit planning costs. Discussion is included on the form that criticism should take and the extent to which planned responses to the data can legitimately be revised after the data are reviewed. The proper role of diagnostics is discussed. Some diagnostic statistics are genuinely criticisms, but many are pre-test diagnostics that play a role in a complex multi-step method of estimation. A third category is elicitation diagnostics which ask data dependent questions about the prior distribution.

#### **Lee, K.**

**PD** July 1988. **TI** Aggregation Bias and Labor Demand Equations for the U. K. Economy. **AU** Lee, K.; Pesaran, M. H.; Pierse, R. G. **AA** Lee and Pierse: Cambridge University. Pesaran: University of California, Los Angeles and Trinity College. **SR** University of California at Los Angeles Department of Economics Working Paper: 492; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 59. **PR** \$2.50;

checks payable to U.C. Regents. **JE** 824, 211. **KW** Labor Demand. Aggregation. Employment. Wages.

**AB** This paper extends the results obtained in Pesaran, Pierse and Kumar (1988), and examines the effect of aggregation on the estimates of long run wage and output elasticities of demand for employment in the U. K. The paper also discusses alternative methods of testing for aggregation bias and proposes direct tests of the discrepancy of the macro parameters from the average of the corresponding micro parameters, and derives tests of aggregation bias in the general case where the parameters of interest may possibly be nonlinear functions of the micro parameters. The paper also develops a Durbin-Hausman type misspecification test of the disaggregate model.

#### **Lehmer, C.**

**TI** Multi-Series Heuristics for Exponential Smoothing. **AU** Snyder, R.; Shah, C.; Lehmer, C.

#### **Lehrer, Ehud**

**PD** October 1988. **TI** Internal Correlation in Repeated Games. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 800; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 40. **PR** no charge. **JE** 026. **KW** Repeated Games. Nash Equilibrium. Information Structure. Correlated Equilibrium.

**AB** We characterize the set of all the Nash equilibrium payoffs in two player repeated games where the signals that the players get after each stage is either trivial (does not reveal any information) or standard (the signal is the pair of actions played). It turns out that if the information is not always trivial then the set of all the Nash equilibrium payoffs coincides with the set of all the correlated equilibrium payoffs. In particular, any correlated equilibrium payoff of the one shot game is also a Nash equilibrium payoff of the repeated game. This means that the information structure of the game substitutes any mediator.

#### **LeRoy, Stephen F.**

**PD** March 1989. **TI** Efficient Capital Markets and Martingales. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 13-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 65. **PR** no charge. **JE** 313, 311. **KW** Capital Markets. Asset Prices. Martingale Model. Efficient Markets.

**AB** This paper surveys the literature of the last twenty years on efficient capital markets as related to the martingale model. After summarizing the early random walk literature and reviewing the martingale model, the paper surveys the variance-bounds literature and the papers on mean reversion in asset prices that grew out of it. It is concluded that the bulk of the more recent evidence does not favor the efficient capital markets model, and that minor generalization of the simplest martingale model does not appear likely to restore the explanatory success of the model.

**TI** Bubbles and Charges. **AU** Gilles, Christian; LeRoy, Stephen F.

**Levin, Richard**

**PD** March 1989. **TI** Cost-Reducing and Demand-Creating R&D with Spillovers. **AU** Levin, Richard; Reiss, Peter. **AA** Levin: Yale University. Reiss: Stanford University. **SR** National Bureau of Economic Research Working Paper: 2876; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** \$2.00. **JE** 621, 611. **KW** Innovations. Technology. Market Structure.

**AB** This paper analyzes R&D policies when the returns to cost-reducing and demand-creating R&D are imperfectly appropriable and market structure is endogenous. Previous characterizations of appropriability are generalized to permit the possibility that own and rival R&D are imperfect substitutes. We also describe how equilibrium expenditures on process and product R&D, as well as equilibrium market structure, depend on technological opportunities and spillovers.

**Levine, David K.**

**TI** Determinacy of Equilibria in Dynamic Models with Finitely Many Consumers. **AU** Kehoe, Timothy J.; Levine, David K.; Romer, Paul M.

**Levinsohn, James A.**

**TI** Distance, Demand, and Oligopoly Pricing. **AU** Feenstra, Robert C.; Levinsohn, James A.

**Lewis, Karen K.**

**PD** February 1989. **TI** The Behavior of Excess Eurocurrency Returns across the Term Structure and a Monetary Regime. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: 505; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 28. **PR** no charge. **JE** 313, 431, 311. **KW** Foreign Exchange. Asset Pricing. CAPM. Risk Premium. Stock Market.

**AB** Recent empirical studies of the risk premium across foreign exchange and other asset markets such as the stock market and longer term bonds have found conflicting evidence about the intertemporal capital asset pricing model. While most studies using data at a maturity horizon of one month or less reject the model, Clarida and Campbell (1987) find they cannot reject the model at a longer three month horizon using a portfolio that includes term premia. This paper investigates the sources of differences in results using portfolio of foreign exchange and term premia at three different maturity horizons. Since the evidence indicates that these returns behave differently during a period of high U.S. monetary variance, a simple model of the behavior of these premia across a change in monetary regime is developed and analyzed.

**PD** February 1989. **TI** Changing Beliefs about Fundamentals and Systematic Rational Forecast Errors: With Evidence from Foreign Exchange. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: 507; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 32. **PR** no charge. **JE** 431, 132. **KW** Exchange Rates. Money Demand. Forward Market. Forecasting. Learning. Rationality.

**AB** Since forecast errors of the dollar exchange rate during

the early 1980s appear to have been systematically wrong ex post, some have claimed the market was irrational. This paper addresses an alternative interpretation. Following a change in the process of a fundamental variable, market participants revise their beliefs about the process using Bayes' Rule. Since the market does not immediately recognize the change, forecast errors are on-average wrong during a period when the market is rationally learning. Empirically, the behavior of the dollar exchange rate following the rise in U.S. money demand in the early 1980s appears significantly related to the underprediction of the dollar's strength implied by the forward market.

**Lewis, Tracy R.**

**PD** January 1989. **TI** Eliminating Price Supports: A Political Economy Perspective. **AU** Lewis, Tracy R.; Ware, Roger; Feenstra, Robert C. **AA** Lewis: University of California at Davis. Ware: University of California at Berkeley and University of Toronto. Feenstra: University of California at Davis. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8902; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 39. **PR** Gratis (if in stock). **JE** 713, 813, 022. **KW** Mechanism Design. Political Economy. Price Supports. Government Programs. Agriculture.

**AB** This paper characterizes information and politically constrained government programs for eliminating price supports. The issues which we examine in this model include (i) To what extent is it possible to reduce the size of oversubscribed industries in light of the information and political constraints that exist? Is a complete "decoupling" of a worker's compensation from her output possible or desirable? (ii) Which "type" of workers (as characterized by their skill levels and outside employment opportunities) remain in the industry? (iii) Which type of worker is harmed by the relocation program? Which coalitions of workers will oppose the reorganization?

**TI** Trade Adjustment Assistance and Pareto Gains from Trade. **AU** Feenstra, Robert C.; Lewis, Tracy R.

**Li, Lode**

**TI** Bertrand Competition with Subcontracting. **AU** Kamien, Morton I.; Li, Lode; Samet, Dov.

**Liang, J. Nellie**

**TI** Dynamics of Market Concentration. **AU** Amel, Dean F.; Liang, J. Nellie.

**Lin, Shoukang**

**TI** Trade Patterns in a Two-Sector Overlapping-Generations World. **AU** Galor, Oded; Lin, Shoukang.

**Lin, Tzong Yau**

**PD** May 1989. **TI** Real Growth Cycle with Adaptive Expectations. **AU** Lin, Tzong Yau; Tse, Wai Man; Day, Richard H. **AA** University of Southern California. **SR** University of Southern California Modelling Research Group Working Paper: M8907; Department of Economics, University of Southern California, University Park, Los Angeles, CA 90089-0152. **PG** 21. **PR** no charge. **JE** 111, 131, 023. **KW** Economic Growth. Chaos. Bifurcation Analysis. Growth Model.

**AB** A neoclassical growth model with adaptive (naive) expectations is presented. A bifurcation analysis is undertaken

which shows how various qualitatively distinct kinds of behavior occur depending on the parameters of technology time preference, population growth, capital depreciation and the rate of neutral technological change. Numerical experiments show that stable steady states, periodic cycles and chaos all occur within the arguably plausible range.

#### Lindsey, Robin

**TI** Information and Time-of-Use Decisions in Stochastically Congestible Facilities. **AU** Arnott, Richard; de Palma, Andre; Lindsey, Robin.

#### Lockwood, Ben

**PD** March 1989. **TI** Informational Externalities in the Labour Market and their Implications for the Duration of Unemployment. **AA** Birkbeck College. **SR** Queen's Institute for Economic Research Discussion Paper: 740; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 45. **PR** \$3.00 Canada; \$3.50 U.S. and Foreign. **JE** 824, 825, 833. **KW** Information Externalities. Unemployment. Productivity. Employee Testing.

**AB** This paper considers a matching model of the labor market where firms can get partial information about workers by testing them prior to hiring them. It is shown that firm's hiring decisions generate several external effects. An informational externality exists where with testing workers of different ability exit unemployment at different rates, and so unemployment duration is a signal of productivity. It is shown that in equilibrium, firms may wish to condition on duration, only hiring those workers whose duration is below a critical value. It is shown that equilibrium is generally inefficient, with too much testing, and too low a critical value for duration. The dependence of this critical value on demand and supply shocks is investigated.

#### Lott, John R. Jr

**TI** The Effect of Rent Maximizing Unions on Why Workers Join Unions. **AU** Bronars, Stephen G.; Lott, John R. Jr.

#### Lovasz, Laszlo

**TI** On Integer Points in Polyhedra: A Lower Bound. **AU** Barany, Imre; Howe, Roger; Lovasz, Laszlo.

#### Lucertini, M.

**PD** May 1989. **TI** Most Uniform Path Partitioning and its Use in Image Processing. **AU** Lucertini, M.; Perl, Y.; Simeone, B. **AA** Lucertini and Simeone: University of Roma. **Perl**: New Jersey Institute of Technology. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: 89570-OR; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 25. **PR** no charge. **JE** 213, 214. **KW** Linear Algorithms. Uniform Partitioning. Path Partitioning. Communication Networks.

**AB** Let  $Q$  be a vertex-weighted path with vertices. For any pair  $(L, U)$  can one find a partition of  $Q$  into  $(a$  given number  $p$  of) subpaths, such that the total weight of every subpath lies between  $L$  and  $U$ ? We present linear-time algorithms for the partitioning problem for given  $(L, U)$  and a  $O(n^2 p \log n)$  algorithm, relying on the above procedures, for finding a partition that minimizes the difference between the largest and the smallest weight of a subpath (most uniform partitioning).

Our approach combines a pre-processing procedure, which detects "obstructions", if any, via a sequence of vertex compressions; and a greedy procedure, which actually finds the desired partition. Path partitioning can be a useful tool in facial image degradation.

#### Lupo, Leonard A.

**TI** Coherent Methods of Estimating Technical Progress. **AU** Swamy, PAVB; Lupo, Leonard A.; Sneed, John D.

#### Lutz, Nancy A.

**TI** Warranties, Durability, and Maintenance: Two-Sided Moral Hazard in a Continuous-Time Model. **AU** Dybvig, Philip H.; Lutz, Nancy A.

#### Lynch, Lisa M.

**PD** March 1989. **TI** Private Sector Training and its Impact on the Earnings of Young Workers. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 2872; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** \$2.00. **JE** 811, 822, 824. **KW** Training. Wage Growth. Job Tenure. Employment.

**AB** While there have been numerous studies devoted to examining the impact of governmental training programs on workers who have experienced difficulties in the labor market, there has been remarkably little research on the actual occurrence and consequences of training provided by the private sector in the U.S. Using data from the new National Longitudinal Survey youth cohort, this paper analyzes how personal characteristics including employment histories, and local demand conditions determine the probability of receiving training and its effect on wages and wage growth of young workers. More specifically, some of the issues addressed here include the relative importance of training and tenure for wage determination and the rate of return to company provided training compared to the rate of return to training received outside the firm and schooling.

#### Lyon, Andrew B.

**PD** February 1989. **TI** Invariant Valuation when Tax Rates Change over Time. **AA** University of Maryland. **SR** University of Maryland Department of Economics Working Paper Series: 89-2; Department of Economics, University of Maryland, College Park, MD 20742. **PG** 6. **PR** no charge. **JE** 321, 323, 522. **KW** Asset Valuation. Investment. Depreciation. Tax Rates.

**AB** Samuelson proved that if investors with different, but constant, tax rates receive economic depreciation, then asset valuations will be independent of the tax rate of each investor. This paper extends these results to the case of tax rates that are not constant over time and corrects Samuelson's conclusions on this case. Further results are derived under an alternative assumption on the discount rates of investors.

**PD** March 1989. **TI** Understanding Investment Incentives under Parallel Tax Systems: An Application to the Alternative Minimum Tax. **AA** University of Maryland. **SR** University of Maryland Department of Economics Working Paper Series: 89-3; Department of Economics, University of Maryland, College Park, MD 20742. **PG** 38. **PR** no charge. **JE** 323, 522, 514. **KW** Investment

Incentives. Alternative Minimum Tax. Business Investment. Income Taxes.

**AB** Many countries' income tax systems consist of multiple parallel tax systems. Most commonly, statutory tax rates may vary with income. As a special case, taxpayers with net losses in a given year and no past tax liability face a zero tax rate in that year, but may use the loss to offset future taxes. In the U.S., the newly enacted alternative minimum tax (AMT) for corporations is a parallel tax system. In addition to taxing income at statutory tax rates different than those under the regular tax system, it provides separate depreciation schedules, allowable deductions, and tax exclusions. This paper examines the conditions under which the existence of a parallel tax system maintains neutral investment incentives for taxpayers who may switch between tax systems.

### Lyons, Richard

**TI** The Mutual Amplification Effect of Exchange Rate Volatility and Unresponsive Trade Prices. **AU** Baldwin, Richard; Lyons, Richard.

**TI** Exchange Rate Hysteresis: The Real Effects of Large vs. Small Policy Misalignments. **AU** Baldwin, Richard; Lyons, Richard.

### MacLeod, W. Bentley

**PD** March 1989. **TI** Labour Turnover and the Natural Rate of Unemployment: Efficiency Wage vs. Frictional Unemployment. **AU** MacLeod, W. Bentley; Malcomson, James M. **AA** MacLeod: Queen's University and Universidad Autonoma de Barcelona, Spain. Malcomson: University of Southampton. **SR** London School of Economics Centre for Labour Economics Discussion Paper: 336; Centre for Labour Economics, London School of Economics, Houghton Street, London WC2A 2AE, U.K. **PG** 37. **PR** no charge. **JE** 824, 821, 131. **KW** Labor Turnover. Efficiency Wages. Frictional Unemployment. Labor Market.

**AB** The responses of wages and unemployment to changes in economic environment are compared for efficiency wage and frictional models of unemployment. Changes in aggregate labor demand, variability in relative demands for products, the cost of living, and unemployment benefits are considered. The effects on wages and unemployment are in the same direction in both models, except that an upward shift in aggregate labor demand can reduce the real wage in the efficiency wage, but not the frictional, model. This exception might explain wage changes that would be implausibly small if the shift were taking place along the labor supply curve.

**TI** Efficiency and Renegotiation in Repeated Games. **AU** Bergin, James; MacLeod, W. Bentley.

### MaCurdy, Thomas

**TI** Predicting Nursing Home Utilization among the High-Risk Elderly. **AU** Garber, Alan M.; MaCurdy, Thomas.

### Maguire, Mike

**TI** Wasted Cultivators and Stunted Girls: Variations in Nutritional Status in a North Indian Village. **AU** Kynch, Jocelyn; Maguire, Mike.

### Makowski, Louis

**PD** May 1989. **TI** Efficient and Individually Rational Bayesian Mechanisms Only Exist on Perfectly Competitive

Environments. **AU** Makowski, Louis; Ostroy, Joseph M. **AA** Makowski: University of California, Davis. Ostroy: University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 566; Department of Economics, University of California, Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 31. **PR** \$2.50. **JE** 022, 213. **KW** Mechanism Design. Perfect Competition. Nash Equilibrium. Trading. Rationality.

**AB** Necessary and sufficient conditions are given for a Bayesian Nash Equilibrium of a mechanism to be simultaneously ex-post efficient and ex-ante individually rational. These conditions require (A) that each individual receive his/her expected marginal product and (B) that the sum of the expected marginal products over individuals equal the total expected gains from trade. Some consequences of this characterization are: (1) the above conditions are equivalent to the conditions required for a dominant strategy mechanism to be efficient and individually rational which, in turn, is equivalent to the condition that the environment must be perfectly competitive; and (2) such mechanisms are generally impossible to construct in environments with a finite number of individuals.

### Malcomson, James M.

**TI** Labour Turnover and the Natural Rate of Unemployment: Efficiency Wage vs. Frictional Unemployment. **AU** MacLeod, W. Bentley; Malcomson, James M.

### Manchester, Joyce M.

**PD** February 1989. **TI** Second Mortgages and Household Saving. **AU** Manchester, Joyce M.; Poterba, James M. **AA** Manchester: Dartmouth College. Poterba: Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 2853; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** \$2.00. **JE** 315, 932, 921. **KW** Mortgages. Housing. Home Equity. Savings.

**AB** This paper investigates the determinants of second mortgage borrowing and the characteristics of second mortgage borrowers. We first calculate the outstanding stock of home equity that remains to be borrowed against on tax-preferred terms, recognizing the limits on interest deductions in the 1986 Tax Reform Act and the 1987 Omnibus Budget Reconciliation Act. We then present cross-sectional evidence suggesting that households who obtain second mortgages after purchasing a home are less wealthy than other households with similar characteristics.

### Mankiw, N. Gregory

**TI** Precautionary Saving and the Timing of Taxes. **AU** Kimball, Miles S.; Mankiw, N. Gregory.

### Mann, Joyce

**TI** Hospital Costs and Patient Access under the New Jersey Hospital Rate-Setting System. **AU** Melnick, Glenn; Mann, Joyce; Serrato, Carl.

### Manuelli, Rodolfo E.

**TI** Labor Contracts in a Model of Imperfect Competition. **AU** Chari, V. V.; Jones, Larry E.; Manuelli, Rodolfo E.

**Markandya, Anil**

**TI** Marginal Opportunity Cost as a Planning Concept in Natural Resource Management. AU Pearce, David W.; Markandya, Anil.

**PD** 1987. **TI** Natural Environments and the Social Rate of Discount. AU Markandya, Anil; Pearce, David W. AA University College London. **SR** University College London Discussion Paper: 87-27; Department of Economics, University College London, Gower Street, London, WC1E 6BT, ENGLAND. **PG** 25. **PR** no charge. **JE** 721, 722, 024. **KW** Discount Rate. Natural Resources. Environment. Externalities.

**AB** It is widely argued that environmental concerns dictate a lowering of the rate of discount. The arguments for and against this proposition are rehearsed and it is shown that there are as many problems with lowering discount rates to accommodate environmental quality as there are gains. One problem is that lower discount rates may alter the total investment/consumption balance in the economy, 'dragging through' raw materials and energy on a greater scale than with higher discount rates. As an alternative to adjusting discount rates a 'sustainability criterion' is suggested whereby programs of investment are constrained not to decrease overall environmental quality.

**PD** May 1989. **TI** The Social Costs of Tobacco Smoking. AU Markandya, Anil; Pearce, David W. AA University College London. **SR** University College London Discussion Paper: 89-04; Department of Economics, University College London, Gower Street, London, WC1E 6BT. **PG** 31. **PR** no charge. **JE** 913, 024. **KW** Smoking. Social Costs. Tobacco.

**AB** This paper sets out a classification framework for the identification of the social costs attached to cigarette smoking. The classification is then used to analyze the existing empirical literature on the social costs of smoking. It is found that (a) the literature rarely correctly identifies social costs, and (b) the empirical results of the literature are frequently spurious. Policy recommendations based on the existing social cost literature are thus potentially misleading. It is recommended that a full social cost - benefit appraisal of smoking be undertaken in order to cast light on appropriate policy towards smoking.

**Marquez, Jaime R.**

**TI** Protectionism and the US Trade Deficit: An Empirical Analysis. AU Helkie, William L.; Marquez, Jaime R.; Hallett, A. J. Hughes; Hutson, G. J.

**TI** Exact and Approximate Multi-period Mean-square Forecast Errors for Dynamic Econometric Models. AU Ericsson, Neil R.; Marquez, Jaime R.

**Marshall, John M.**

**PD** June 1988. **TI** A Reevaluation of the Evidence on Decreasing Average Costs in Nuclear Power. AU Marshall, John M.; Navarro, Peter. AA Marshall: University of California, Santa Barbara. Navarro: University of California, Irvine. **SR** University of California at Santa Barbara Department of Economics Working Paper: 283; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 28. **PR** no charge. **JE** 723, 635. **KW** Energy. Nuclear Power. Firm Size. Cost Function.

**AB** Previous studies of nuclear power plant construction

report decreasing average costs. We reexamine the evidence. We show that the cost concept used previously is flawed because it ignores time discounting. Relying on standard arguments in capital theory and finance, we endorse using reported cost, instead. In data for Japan, the flawed cost measure shows decreasing average costs similar to those reported using that measure in previous U.S. studies. The correct measure shows that average costs are approximately constant in the Japanese data. Decreasing cost would support a strategy of building larger reactors. Its absence suggests shifting to smaller ones.

**PD** January 1989. **TI** Proportion Subindexes. AA University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 5-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 24. **PR** no charge. **JE** 022, 227, 134. **KW** Consumer Price Index. Cost of Living. Profit Function.

**AB** Received wisdom on consumer price subindexes holds that they are meaningful only when preferences are separable in a particular, unlikely way. This paper develops the proportion subindex, which does not rely upon separability. Proportion indexes are also applicable to producer prices. The proportion subindex generalizes formal and interpretative aspects of the classic index of the true cost of living. Alternative subindexes generalize only formal properties. Defining proportion subindexes is convenient, for it involves only the ordinary expenditure or profit function. Defining alternative subindexes requires first the building of special variants of the expenditure or profit function.

**TI** The Excess Burden of Lottery Finance. AU Kim, Sung Tai; Marshall, John M.

**PD** April 1989. **TI** Welfare Analysis without Expected Utility. AA University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 23-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 31. **PR** no charge. **JE** 024, 026. **KW** Uncertainty. Welfare Theory. Consumer Preferences.

**AB** This paper extends Bergsonian welfare analysis to an environment of uncertainty where preferences are not expected utility and may even be state-inconsistent. Given state-inconsistent preferences, the familiar ex ante efficiency is also state-inconsistent. Other efficiency and welfare concepts achieve state consistency by ignoring entirely the prospective preferences of consumers. The framework developed in this paper allows welfare judgments to be state-consistent while respecting prospective and conditional preferences.

**Marston, Richard C.**

**TI** Price and Output Adjustment in Japanese Manufacturing. AU Branson, William; Marston, Richard C.

**Matsui, Akihiko**

**PD** May 1988. **TI** Information Leakage Forces Cooperation. AA Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 786; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 32. **PR** no charge. **JE** 026. **KW** Repeated Games. Espionage. Perfect Equilibrium. Pareto Efficient.

**AB** This paper considers a two-person repeated game in which there is a small probability of espionage, i.e., that one or both of the players will be informed of the other's supgame strategy and have a chance to revise his strategy based on this information before the game begins. It is shown that in such a game any subgame perfect equilibrium pair of payoffs is Pareto efficient provided that the probability of espionage is small enough. In view of the "Folk Theorem", several attempts have been made to shrink the set of outcomes that are supported by equilibria in an infinitely repeated game. Two main approaches are to create new solution concepts which allow "collective deviation", and to introduce bounded rationality considerations. The present paper assumes neither "collective deviation" nor bounded rationality to derive the result.

**PD** August 1988. **TI** Consumer-Benefited Cartels under Strategic Capital Investment Competition. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 798; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 31. **PR** no charge. **JE** 616, 611, 022, 522. **KW** Cartel. Capital Investment. Excess Capacity. Japan. Consumer Surplus.

**AB** The purpose of this paper is to refute the generally accepted idea that a cartel raises producers' surplus at the expense of consumers' surplus. If firms in an industry expect that a cartel in which the output is allocated on the basis of the capital equipment will be formed, then each firm tries to make a larger capital investment than before, which may lead to large consumers' surplus. Through this argument, I shall present one of the reasons why heavy industries had excess capacity in postwar Japan.

### Matsuyama, Kiminori

**PD** March 1989. **TI** Endogenous Price Fluctuations in an Optimizing Model of Monetary Economy. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 825; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 35. **PR** no charge. **JE** 131, 133, 311. **KW** Chaos. Dynamic Model. Brock Model. Endogenous Cycles. Money Supply.

**AB** This paper demonstrates that an optimizing model of monetary economy can produce perfect foresight equilibria, in which the price level fluctuates forever in a stationary environment. These equilibrium paths are bounded so that neither the transversality condition nor the fractional backing of paper money proposed by Obstfeld and Rogoff (1983) can rule them out. The chaotic dynamics is also considered. Although an economy with a high rate of money supply growth is more likely to be in the chaotic region (an increase in the growth rate of money supply leads to a period-doubling transition to chaos), the chaos can emerge even with a constant money supply and an arbitrarily small discount rate.

### Matzkin, Rosa L.

**PD** July 1989. **TI** A Nonparametric Maximum Rank Correlation Estimator. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 918; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 22. **PR** \$2.00. **JE** 211. **KW** Nonparametric. Rank Correlation. Estimators.

Consistency. Regression Model.

**AB** This paper presents a nonparametric and distribution-free estimator for the function,  $h^*$ , of observable exogenous variables,  $x$ , in the generalized regression model,  $y = G(h^*(x), \mu)$ . The method does not require a parametric specification for either the function  $h^*$  or for the distribution of the random term  $\mu$ . The function  $G$  is only assumed to be monotone increasing. The estimation proceeds by maximizing a rank correlation criterion (Han (1987)) over a set of functions that are monotone increasing, concave, and homogeneous degree one; the function  $h^*$  is assumed to belong to this set of functions. The estimator is shown to be strongly consistent.

### Mayer, Colin

**TI** Structure and Performance: Global Interdependence of Stock Markets around the Crash of October 1987. **AU** Bertero, Elisabetta; Mayer, Colin.

### Mayer, Thomas

**PD** August 1989. **TI** GNP Targeting -- What Are the Issues?. **AA** University of California at Davis. **SR** University of California at Davis Research Program in Applied Macro and Macro Policy: 63; Department of Economics, University of California at Davis, Davis, CA 95616. **PG** 21. **PR** no charge. **JE** 311. **KW** Monetary Targets. Monetary Policy.

**AB** Instead of arguing for--or against--GNP targeting this paper tries to clarify the underlying issues. It argues that both sides have often talked past each other. The case for GNP targeting is entirely convincing if one assumes the Fed is an efficient agent of the public, and that it is known to be such. The relevant issue therefore is whether the case for GNP targeting survives the replacement of this assumption by a more realistic one.

**PD** August 1989. **TI** Forecast Errors and Stabilization Policy. **AA** University of California at Davis. **SR** University of California at Davis Research Program in Applied Macro and Macro Policy: 62; Department of Economics, University of California at Davis, Davis, CA 95616. **PG** 42. **PR** no charge. **JE** 311, 133, 131. **KW** Monetary Policy. Stabilization Policy. Forecast Errors. Economic Fluctuations.

**AB** This paper uses a variant of Milton Friedman's sum-of-variances model to estimate the efficacy of countercyclical monetary policy. It deals with an efficient monetary policy that is entirely dedicated to countercyclical stabilization, and finds that such an (unlikely) policy could probably moderate cyclical fluctuations, despite errors in forecasting GNP and in estimating the impact of the monetary policy.

### McDowell, John M.

**TI** The Impact of Technology Adoption on Market Structure. **AU** Hannan, Timothy H.; McDowell, John M.

### McKenzie, George

**TI** Econometric Modelling of the Turkish Financial Sector: (1964-1986). **AU** Insel, Ayso; McKenzie, George.

### Medoff, James

**TI** The Employer Size Wage Effect. **AU** Brown, Charles; Medoff, James.

**Meghir, Costas**

**PD** December 1988. **TI** Frequency of Purchase and the Estimation of Demand Systems. **AU** Meghir, Costas; Robin, Jean Marc. **AA** Meghir: University College London. Robin: Institut National de la Recherche Agronomique, Paris. **SR** University College London Discussion Paper: 89-01; Department of Economics, University College London, Gower Street, London, WC1E 6BT. **PG** 44. **PR** 2.00 pounds. **JE** 921, 229. **KW** Demand System. Food. Measurement Error. Consumer Demand.

**AB** In this paper we consider a joint model for frequency of purchase and consumer demand. We discuss sufficient identifying assumptions for the estimation of consumer demand from survey data for the general case of nonlinear (or linear) Engel curves. Moreover we show that in many cases the actual number of purchases is necessary in order to obtain consistent parameter estimates for the demand system. The empirical application relates to the estimation of a demand system for French foodstuffs.

**TI** Using Complementary Data Sources: An Application to Labour Supply and Job Search. **AU** Arellano, Manuel; Meghir, Costas.

**TI** Testing for the Separability of Commodity Demands from Male and Female Labour Supply. **AU** Browning, Martin; Meghir, Costas.

**Megna, Pamela**

**PD** July 1989. **TI** Profit Rates, Intangible Capital and Rent Seeking. **AU** Megna, Pamela; Mueller, Dennis C. **AA** Megna: Federal Trade Commission. Mueller: University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 89-14; Department of Economics, University of Maryland, College Park, MD 20742. **PG** 43. **PR** no charge. **JE** 611, 531, 521, 522. **KW** Intangible Capital. Profits. Rent Seeking. Advertising.

**AB** Differences in company profitability are often assumed to arise from the failure to adjust profit rates for intangible capital. This conjecture is shown to be false in this paper. Intangible advertising capital stocks are estimated for 30 firms in the toys, distilled beverages, cosmetics, and pharmaceutical industries, and 11 pharmaceutical companies. Heterogeneity across firms is found in the depreciation rates for these forms of capital, and their effects on sales and profitability. This heterogeneity is interpreted as being inconsistent with the commonly made assumption that advertising and R&D capital is available to all firms on equal terms. The results are consistent with the hypothesis that advertising and R&D are rent-seeking investments.

**Melino, Angelo**

**TI** The Effects of Public Policy on Strike Duration. **AU** Gunderson, Morley; Melino, Angelo.

**PD** December 1988. **TI** Pricing Foreign Currency Options with Stochastic Volatility. **AU** Melino, Angelo; Turnbull, Stuart. **AA** University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8816; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 49. **PR** Gratis (if in stock). **JE** 431, 441. **KW** Exchange Rates. Option Prices. Foreign Currency.

**AB** This paper investigates the consequences of stochastic

volatility for pricing spot foreign currency options. A diffusion model for exchange rates with stochastic volatility is proposed and estimated. The parameter estimates are then used to price foreign currency options and the predictions are compared to observed market prices. We find that allowing volatility to be stochastic results in a much better fit to the empirical distribution of the Canada-U.S. exchange rate, and that this improvement in fit results in more accurate predictions of observed option prices.

**Melnick, Glenn**

**PD** September 1988. **TI** Hospital Costs and Patient Access under the New Jersey Hospital Rate-Setting System. **AU** Melnick, Glenn; Mann, Joyce; Serrato, Carl. **AA** Rand Corporation. **SR** Rand Report: R-3601; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. **PG** 82. **PR** no charge. **JE** 913. **KW** Health Care. Medical Costs. Hospitals.

**AB** In an effort to control the increase in health care expenditures, while at the same time improving or at least maintaining access to hospital services, several states enacted prospective hospital rate setting systems in the 1970s and early 1980s. This report evaluates New Jersey's system, which was unique because it elected to pay hospitals on the basis of the then newly created case-mix classification system, diagnosis-related groups (DRGs). The authors evaluate New Jersey's hospital rate setting system and analyze the responses of hospitals in the early years of the program.

**Mendelson, Haim**

**TI** Index and Index-Futures Returns. **AU** Amihud, Yakov; Mendelson, Haim.

**Metcalfe, Gilbert E.**

**PD** November 1988. **TI** Arbitrage and the Savings Behavior of State and Local Governments. **AA** Princeton University. **SR** John M. Olin Program for the Study of Economic Organization and Public Policy: 30; Department of Economics/Woodrow Wilson School of Public & International Affairs, Princeton, NJ 08544. **PG** 47. **PR** no charge. **JE** 321, 323, 324. **KW** Public Finance. Financial Assets. State Governments. Municipal Bonds. Tax Arbitrage.

**AB** The combination of the tax exempt nature of state and local governments and the federal tax exemption of interest income from municipal bonds creates a strong incentive for arbitrage activity on the part of municipal governments. Financial asset holdings of state and local governments began increasing dramatically at the end of the 1970s. This paper argues that part of that build-up can be attributed to arbitrage activity as state and local governments took advantage of an historic yield spread between taxable and tax exempt interest rates.

**PD** November 1988. **TI** Federal Tax Policy and Municipal Financial Behavior. **AA** Princeton University. **SR** John M. Olin Program for the Study of Economic Organization and Public Policy: 29; Department of Economics/Woodrow Wilson School of Public & International Affairs, Princeton University, Princeton, NJ 08544. **PG** 20. **PR** no charge. **JE** 313, 323, 324, 325. **KW** Tax Deductions. State Governments. Tax Policy. Public Finance. Municipal Bonds. Public Spending.

**AB** This paper summarizes research on the effects of federal tax policy on state and local government financial policy.

Financial policy is broadly defined to include the choice of tax versus debt finance and the choice of individual tax instruments. The main conclusion of this research is that there are unanticipated or greater than anticipated behavioral responses on the part of state and local governments to changes in federal tax policy and that these responses can dramatically alter the revenue forecasts which underlie given policy proposals.

### Metzger, Michael R.

**PD** May 1989. **TI** A Recalculation of Cline's Estimates of the Gains to Trade Liberalization in the Textile and Apparel Industries. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 174; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 21. **PR** no charge. **JE** 411, 422, 631, 022. **KW** Textiles. Apparel. Quotas. Tariffs. Imports. Consumer Surplus. Producer Surplus. Trade Policy.

**AB** In a recent book, Cline estimated that current trade restrictions on textiles generate a net efficiency loss of \$811 million annually, while those on apparel involve a loss of \$7.3 billion. This paper, within the framework of Cline's analysis of textile and apparel trade restriction, develops a more theoretically sound methodology of welfare analysis of social surplus. Specifically, it focuses on three methodological issues: the measurement of changes in consumer surplus when two or more prices changes simultaneously, the appropriate characterization of policy-induced changes in social welfare, and the inter-relationship of the economic surplus' of two vertically related industries.

### Meyer, Laurence H.

**TI** The Fischer Equation Controversy: A Reconciliation of Contradictory Results. **AU** Jha, Raghendra; Sahu, Anandi P.; Meyer, Laurence H.

### Michaely, Roni

**TI** The Structure of Spot Rates and Immunization. **AU** Elton, Edwin J.; Gruber, Martin J.; Michaely, Roni.

### Milbourne, Ross D.

**PD** June 1989. **TI** Unemployment Insurance and Unemployment Dynamics. **AU** Milbourne, Ross D.; Purvis, Douglas D.; Scoones, W. David. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 750; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 40. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** 822, 821, 133. **KW** Unemployment Insurance. Unemployment. National Income. Aggregate Demand.

**AB** One of the puzzling features of the recent behavior of the Canadian unemployment rate is its persistence in the presence of sustained expansion in real national income. Neither deficient aggregate demand nor a once for all, supply side induced increase in the natural rate provide a convincing explanation of this phenomenon. This paper presents a model which explains how aspects of unemployment insurance (UI) in Canada will cause persistence: unemployment will be highly serially correlated even if output is white noise. We document the increased persistence of the unemployment rate since 1977 and we show that the model accounts for much of this phenomenon.

### Miller, Marcus

**PD** April 1989. **TI** Exchange Rate Bands and Realignments in a Stationary Stochastic Setting. **AU** Miller, Marcus; Weller, Paul. **AA** University of Warwick. **SR** Centre for Economic Policy Research Discussion Paper: 299; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 21. **PR** \$4.00. **JE** 431, 432. **KW** Exchange Rates. Monetary Policy. European Monetary System.

**AB** The extent which exchange rate management can coexist with an independent monetary policy is examined in the context of a model with exchange rate bands. Using a Dornbusch model in which stochastic shocks are added to the Phillips curve, we analyze the implications of assuming that the monetary authorities follow certain simple rules for realigning the band when fundamentals have drifted too far from equilibrium. Assuming that information about whether the bands is to be defended or there is to be a realignment is revealed at the point when the exchange rate hits the edge of the band, we show how the path of the exchange rate can be completely characterized in terms of the solution to a second order nonlinear differential equation - together with jumps in the rate at the edge of the band, which satisfy a zero profit arbitrage condition.

**PD** April 1989. **TI** Solving Stochastic Saddlepoint Systems: A Qualitative Treatment with Economic Applications. **AU** Miller, Marcus; Weller, Paul. **AA** University of Warwick. **SR** Centre for Economic Policy Research Discussion Paper: 308; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 25. **PR** \$4.00. **JE** 023, 133, 213. **KW** Dynamic Model. Stochastic Shocks. Expectations. Linear Model. Asset Prices.

**AB** We examine the effect of introducing stochastic shocks into a linear rational expectations model with saddlepoint dynamics generated by a forward looking asset price. We derive the fundamental differential equation governing the path of the asset price as a function of the 'sluggish' variable. The equation does not admit of closed form solutions in general, but we provide a complete qualitative characterization of the solution paths which are symmetric about equilibrium. The first application analyzes how financial markets might react to the implementation of fiscal stabilization policy where public expenditures are only adjusted when GNP moves outside a threshold around a target level. The second application examines exchange rate behavior in the presence of a currency subject to a known realignment rule requiring an adjustment to monetary policy.

### Miller, Preston J.

**PD** April 1989. **TI** How Little We Know About Budget Policy Effects. **AU** Miller, Preston J.; Roberds, Will. **AA** Miller: Federal Reserve Bank of Minneapolis. Roberds: Federal Reserve Bank of Atlanta. **SR** Federal Reserve Bank of Minneapolis Staff Report: 120; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55480. **PG** 28. **PR** no charge. **JE** 321, 322. **KW** Government Spending. Identification Problem. Government Policy.

**AB** Using a simple model, we show why previous empirical studies of budget policy effects are flawed. Due to an identification problem, those studies' findings can be shown to be consistent with either policies mattering or not.

**Minford, Patrick**

**PD** December 1988. **TI** The Poverty Trap and the Laffer Curve - What Can the GHS Tell Us?. **AU** Minford, Patrick; Ashton, Paul. **AA** University of Liverpool. **SR** Centre for Economic Policy Research Discussion Paper: 275; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 22. **PR** \$4.00. **JE** 824. **KW** Poverty. Labor Supply. Tax Rates. Unemployment.

**AB** Budget constraints are drawn up for annual hours and net pay, typically composed of two linear segments: 'benefit-constrained', where extra work forfeits benefit and 'normal', where extra work is subject to the standard marginal tax rate. There are additional linear segments for those on upper tax rates. By ordering males according to the ratio of their maximum net earning power to that when totally unemployed, we establish the appropriate cut-off point for the poverty trap and upper rate segments, from which we estimate labor supply responses to slope and intercept variables. The results suggest high substitution elasticities for those who experienced unemployment during the previous year and those on higher incomes; for average employed men the elasticity was quite low.

**Mizon, Grayham E.**

**PD** March 1989. **TI** The Role of Econometric Modelling in Economic Analysis. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 8904; Department of Economics, University of Southampton, Southampton SO9 5NH, ENGLAND. **PG** 51. **PR** No charge. **JE** 211, 212. **KW** Econometric Models. Econometric Theory. Economic Analysis.

**AB** It is argued that in order for economic analysis to be influential the credentials of the underlying economic model must be established, and that it is the model's congruence, rather than its pedigree, that determines its validity. Congruence requires a model to be coherent with sample information, a priori theory, and that it can encompass rival models. The fundamental weaknesses of seeking to use sample information to confirm theories are pointed out and emphasized. Modelling of the relationship between a measure of the variability of relative price changes and the aggregate rate of inflation in the UK, is used to illustrate the argument.

**Montiel, Peter**

**TI** Devaluation Crises and the Macroeconomic Consequences of Postponed Adjustment in Developing Countries. **AU** Edwards, Sebastian; Montiel, Peter.

**Moore, George R.**

**TI** Monetary Policy Rules and the Indicator Properties of Asset Prices. **AU** Fuhrer, Jeffrey C.; Moore, George R.

**Moorthy, Vivek**

**PD** June 1989. **TI** Unemployment in Canada and the U.S.: Lessons from the 1980's. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 8911; 33 Liberty St., Rm. 901, New York, NY 10045. **PG** 33. **PR** no charge. **JE** 824, 821, 133. **KW** Unemployment Insurance. Hysteresis. Natural Rate. Unions. Involuntary Unemployment.

**AB** This paper examines the post-war behavior of

unemployment in Canada and the U.S. to ascertain whether Canada's higher unemployment vis-a-vis the U.S. in the 1980's is due to hysteresis or reflects a higher natural rate. Statistical tests suggest that hysteresis effects, arising from insider (union) behavior, do not appear to be important; instead, Canada's higher unemployment may reflect in part a higher natural rate due to the greater generosity of its unemployment insurance benefits. These tests may not be conclusive because simultaneity problems cannot be completely controlled. However, a breakdown of the unemployed by reason, buttressed by a comparison of demographic trends in the two countries, is indicative of a higher natural rate in Canada.

**Morrison, Catherine J.**

**PD** June 1989. **TI** Unraveling the Productivity Growth Slowdown in the U.S., Canada, and Japan: The Effects of Subequilibrium, Scale Economies and Markups. **AA** Tufts University. **SR** National Bureau of Economic Research Working Paper: 2993; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** \$2.00. **JE** 825, 631, 122, 226. **KW** Productivity. Manufacturing. Economies of Scale. Utilization. Technology. Fluctuations.

**AB** Measures of productivity growth typically include in the productivity "residual" the impacts of subequilibrium from fixity of factors, costs of adjustment, returns to scale and markups. This paper proposes a general two part framework for adjusting the residual measure to take these impacts into account. Errors computing the weights on output and quasi-fixed input growth in traditional measures are first corrected for both primal and cost side measures. Then the deviation of revenues from costs is used to decompose the full primal measure to identify the differential influences of technical change, utilization fluctuations, scale economies and price margins. Use of the framework is illustrated empirically for the U.S., Japanese and Canadian manufacturing sectors, using an econometric model that allows explicit incorporation and measurement of these influences.

**Mueller, Dennis C.**

**TI** Profit Rates, Intangible Capital and Rent Seeking. **AU** Megna, Pamela; Mueller, Dennis C.

**Murota, Kazuo**

**PD** April 1989. **TI** Computational Use of Group Theory in Bifurcation Analysis of Symmetric Structures. **AU** Murota, Kazuo; Ikeda, Kiyohiro. **AA** Murota: University of Bonn and University of Tokyo. Ikeda: Nagaoka University of Technology, Japan. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: 89572-OR; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 34. **PR** no charge. **JE** 213. **KW** Bifurcation Analysis. Group Representation Theory. Parallelism. Sparse Matrix.

**AB** An efficient computational procedure is proposed for identifying singular points in global bifurcation analysis of the static behavior of symmetric discrete structures such as axisymmetric truss domes. Assuming group equivariance of the system of equations describing the steady state, and making use of group representation theory, the proposed method decomposes the Jacobian matrix (or tangent stiffness matrix) into block-diagonal form, with possibly repeated occurrences

of identical blocks, by means of a suitable "local" coordinate transformation. The "local" transformation is computationally favorable in that it requires a small amount of computation and preserves the sparsity of the original Jacobian matrix fairly well.

### Murphy, Kevin J.

TI Relative Performance Evaluation for Chief Executive Officers. AU Gibbons, Robert; Murphy, Kevin J.

TI Performance Pay and Top-Management Incentives. AU Jensen, Michael C.; Murphy, Kevin J.

### Myerson, Roger B.

PD July 1988. TI A Theory of Voting Equilibria. AU Myerson, Roger B.; Weber, Robert J. AA Northwestern University. SR Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 782; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. PG 38. PR no charge. JE 025. KW Voting Equilibrium. Elections. Political Candidate.

AB A theory of voting equilibria is developed, wherein the candidates' chances of winning affect the voters' behavior. A general existence theorem for proper voting equilibria is proved. Assuming that voters use a covariance criterion to choose their votes, several examples are presented and approval voting, plurality voting, and Borda rule are compared. The significance of the focal-point effect for elections with multiple equilibria is discussed.

### Nachane, D.

TI Wages and Prices in Europe: A Test of the German Leadership Thesis. AU Artis, M. J.; Nachane, D.

### Nagel, Jack H.

TI Approval Voting in Practice. AU Brams, Steven J.; Nagel, Jack H.

### Nason, James M.

TI Nonparametric Exchange Rate Prediction?. AU Diebold, Francis X.; Nason, James M.

### Navarro, Peter

TI A Reevaluation of the Evidence on Decreasing Average Costs in Nuclear Power. AU Marshall, John M.; Navarro, Peter.

### Nelson, Julianne

PD January 1989. TI The Limits of Liability to Input Suppliers and Bondholders: Bankruptcy, Moral Hazard, and Production Choices. AA New York University. SR New York University Salomon Brothers Center Working Paper: 504; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. PG 19. PR no charge. JE 521, 522, 514, 512. KW Bankruptcy. Corporate Leverage. Business Equity. Managerial Economics.

AB This paper focuses on the links between bankruptcy rules and the production consequences of changes in corporate leverage. It provides conditions under which firms financed only with equity have the incentive to issue debt and shows that

the impact of this debt on the firm's scale of production depends upon the limits of managerial liability. In particular, if the manager of a firm financed only by equity has limited liability to input suppliers, then that manager generally has the incentive to increase both corporate leverage and the scale of production. If, on the other hand, the manager of such a firm is fully liable to input suppliers, then he or she generally has the incentive to raise corporate leverage and reduce the scale of production. These results illustrate the impact on corporate shareholders of debt issued under different legal rules.

### Neven, Damien

PD April 1989. TI Structural Adjustment in European Retail Banking: Some Views from Industrial Organisation. AA INSEAD, Fontainebleau. SR Centre for Economic Policy Research Discussion Paper: 311; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. PG 33. PR \$4.00. JE 423, 312, 442, 613. KW European Integration. Price Discrimination. Regulation. Banking. Commercial Banks. Europe.

AB This paper tries to assess how the current program of European integration will affect the structure of the European retail banking industry. It is argued that trade in banking services is, and will presumably remain, limited, while there is still concern about possible trade diversion. Next, we analyze the conditions for the establishment of subsidiaries of European banks in other European countries. We argue that current directives will matter in so far as they set in motion a process of competitive deregulation. We find that deregulation should induce more price competition. In turn, this will affect bank strategies in terms of the quality of service they choose to offer, in terms of the number and locations of their branches, in terms of the price discrimination they can achieve and in terms of the way in which customer loyalty can be exploited.

### Newell, Andrew

PD March 1989. TI Three Squeezes: The Demand for Labour During Depressions. AA Centre for Labor Economics London School of Economics. SR London School of Economics Centre for Labour Economics Discussion Paper: 342; Centre for Labour Economics, London School of Economics, Houghton Street, London WC2A 2AE, U.K. PG 35. PR no charge. JE 824, 131, 821. KW Unemployment. Wages. Depressions. United Kingdom. Labor Demand.

AB Simple dynamic labor demand schedules are estimated for the three most severe depressions in twentieth century British experience, using monthly data. The results suggest that employment adjustment with respect to changes in real wages was much faster in these depressions than previously estimated on longer time series.

### Nickell, Stephen J.

TI The Thatcher Miracle. AU Layard, Richard; Nickell, Stephen J.

PD April 1989. TI Insider Forces and Wage Determination. AU Nickell, Stephen J.; Wadhvani, Sushil. AA Nickell: Oxford Institute of Economics and Statistics. Wadhvani: London School of Economics. SR Oxford Applied Economics Discussion Paper: 72; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. PG 38. PR no charge. JE 824, 833, 821. KW Wages. Hysteresis. Labor Market.

**AB** The aim of this paper is to utilize firm based data to investigate the role of insider forces in wage determination. We conclude that i) insider forces have a significant impact, ii) insider based hysteresis effects are small but significant, iii) wages become more rigid when demand is expected to fall and iv) outside factors, in particular the state of the labor market, play an important role.

**TI** Employment and Wage Flexibility in Interwar Britain.  
**AU** Dimsdale, N. H.; Nickell, Stephen J.; Horsewood, N.

**Nicodano, Giovanna**

**PD** March 1989. **TI** Equilibrium Public Information in Asset Markets. **AA** Princeton University and Università L. Bocconi, Italy. **SR** Princeton Financial Research Center Memorandum: 105; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544. **PG** 39. **PR** \$3.00. **JE** 026, 313, 311. **KW** Public Information. Cheap Talk. Stock Market. Asset Prices. Transaction Costs.

**AB** An information monopolist publicly supplies part of his private information on the return of an asset. This occurs despite the fact that he is exchanging the asset with uninformed traders in a competitive stock market. Knowledge of how public information is being manipulated may not prevent ex ante or ex post uninformed traders' welfare from falling. Market rationality notwithstanding, asset price deviates from its fundamental value because it also incorporates the value of information. Public information and semistrong informational efficiency cannot coexist if information dissemination is costly.

**Nyarko, Yaw**

**PD** March 1989. **TI** Bayes' Rational Equilibria. **AA** New York University. **SR** New York University Center Economic Research Reports: 89-05; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 58. **PR** none. **JE** 026. **KW** Bayesian Games. Rational Equilibrium. Learning.

**AB** We study the Bayes' Rational Equilibrium (BRE) for games with imperfect information as the solution concept that arises when we suppose that agents behave as though they obey the Savage (1954) axioms and also suppose that the rationality of agents is common knowledge and where we suppose nothing else. We relate the BRE to the Nash and Bayesian Nash (BNE) equilibrium concepts found in the literature. We identify two classes of models: Class D where a dominance condition holds and class C where a contraction property holds. We show that in Class D models any set of actions is possible as a BRE. In class C models we show that all BRE are necessarily BNE and the BNE are unique.

**O'Brien, James M.**

**TI** Some Red Flags Concerning Market Value Accounting.  
**AU** Berger, Allen N.; Kuester, Kathleen A.; O'Brien, James M.

**Obstfeld, Maurice**

**PD** February 1989. **TI** Dynamic Seigniorage Theory: An Exploration. **AA** University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 2869; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 45. **PR** \$2.00. **JE** 311,

023, 134. **KW** Seigniorage. Inflation. Public Finance. Budget Deficits.

**AB** This paper shows that the optimal extraction of seigniorage implies a strong tendency for inflation to fall over time toward its socially optimal level. The point is made using a multi-period model in which, (i) the government can finance deficits through bond issue or money creation, (ii) private-sector expectations are rational, and (iii) the government sets the inflation rate each period in a discretionary manner.

**TI** Exchange-Rate Dynamics under Stochastic Regime Shifts: A Unified Approach. **AU** Froot, Kenneth A.; Obstfeld, Maurice.

**Oh, Seonghwan**

**PD** 1987. **TI** Speculative Runs, Fundamental Runs, and Deposit Contracts. **AU** Oh, Seonghwan; Wrase, Jeffrey. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 87-1; Department of Economics, Brown University, Providence, RI 02912. **PG** 19. **PR** No charge. **JE** 312, 311. **KW** Banking. Demand Deposits. Speculation.

**AB** This paper analyzes the design of demand deposit contracts when a bank faces the possibility of speculative runs and fundamental runs arise if depositors anticipate that the number of withdrawals will force the bank into insolvency. Fundamental runs arise if depositors, upon receipt of new information about bank investment returns, calculate that withdrawal dominates deposit retention. Deposit contracts with suspension of payoffs eliminate incentives for depositors to participate in a speculative run but cannot always implement the optimal consumption allocation. Suspension contracts can implement, however a second-best allocation that dominates the allocation available to depositors in autarky.

**PD** May 1989. **TI** The New Perspective on Keynesism Coordination Failure: Theory and Evidence. **AU** Oh, Seonghwan; Waldman, Michael. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 559; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 38. **PR** \$2.50. **JE** 133, 131, 023. **KW** Business Cycles. Economic Fluctuations. Leading Indicators.

**AB** A number of authors have employed models which exhibit potential coordination failure to show that many features of the Keynesian framework can be captured in models consistent with the microfoundations approach. In a recent paper Cooper and John (1988) argue that one property shared by many of these models is the presence of strategic complementarity, and that this is the critical feature which lies behind the finding of Keynesian type results. In this paper we derive a prediction of the strategic complementarity approach concerning how an economy should respond to false pieces of information, and test the prediction by looking at expectational shocks measured by revisions of the series of leading economic indicators.

**PD** August 1989. **TI** Keynesian Coordination Failure and Persistence. **AU** Oh, Seonghwan; Waldman, Michael. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 570; Department of Economics, 2263 Bunche, Los Angeles, CA 90024. **PG** 31. **PR** \$2.50. **JE** 023, 131, 133. **KW** Coordination Failure. Economic Fluctuations. Adjustment Costs. Unanticipated Shocks.

**AB** Starting with the work of Diamond (1982), Hart (1982), Weitzman (1982), and Bryant (1983), a number of authors have employed models which exhibit potential coordination failure to show that many features of the Keynesian framework can be captured in models consistent with the microfoundations approach. In a recent paper Cooper and John (1988) argue that one property shared by many of these models is the presence of strategic complementarity, and that this is the crucial feature which lies behind the finding of Keynesian type results. The current paper argues that the presence of strategic complementarity in the macro setting is potentially an important factor in explaining why the economy exhibits persistent responses to temporary shocks.

### Okina, Kunio

**TI** News and the Dollar/Yen Exchange Rate, 1931-1933: The End of the Gold Standard, Imperialism, and the Great Depression. **AU** Ito, Takatoshi; Okina, Kunio; Teranishi, Juro.

### Osler, Carol L.

**PD** August 1988. **TI** Terms of Trade and the Transmission of Output Shocks in a Rational Expectations Model. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 2681; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** \$2.00. **JE** 411, 431, 023. **KW** Exchange Rate. Productivity. Portfolio. Investment. International Trade.

**AB** This paper analyzes the effects of productivity shocks on the current and future terms of trade and on output in a two-country framework. An overlapping generations model is used in which individuals allocate their savings between domestic and foreign capital assets according to their preferences for risk and return. Since production in both countries is specialized, changes in the terms of trade affect investment returns in both countries; rational expectations regarding such changes are assumed and a new approach to analyzing the comparative statics of rational expectations equilibria is developed.

### Ostroy, Joseph M.

**PD** August 1988. **TI** Non-Atomic Economies and the Boundaries of Perfect Competition. **AU** Ostroy, Joseph M.; Zame, William R. **AA** Ostroy: University of California, Los Angeles. Zame: State University of New York at Buffalo. **SR** University of California at Los Angeles Department of Economics Working Paper: 502; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 52. **PR** \$2.50; checks payable to U.C. Regents. **JE** 021. **KW** Imperfect Competition. Walrasian Equilibrium. Market Core.

**AB** This paper explores the boundary between perfect and imperfect competition in non-atomic economies. The heart of the paper is the construction of a model of an imperfectly competitive economy with a non-atomic continuum of traders and a continuum of differentiated commodities, for which Walrasian equilibria exist. The failure of perfect competition in this instance can be identified in two ways: the core is strictly larger than the set of Walrasian allocations, and individuals can affect prices. The crucial condition which leads to imperfect competition is that markets are physically and economically thin.

**PD** September 1988. **TI** The Transactions Role of Money.

**AU** Ostroy, Joseph M.; Starr, Ross M. **AA** Ostroy: University of California, Los Angeles. Starr: University of California, San Diego. **SR** University of California at Los Angeles Department of Economics Working Paper: 505; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 72. **PR** \$2.50; checks payable to U.C. Regents. **JE** 021, 023. **KW** Money. Medium of Exchange. Resource Allocation. Budget Constraints. Barter.

**AB** We survey several contributions to the general equilibrium modelling of the medium of exchange function of money. A common element of these contributions is the imposition of a sequence of budget constraints replacing the single constraint in the frictionless model of Walrasian barter. Emphasis is given to the informational and strategic rationale for this replacement. We also pay attention to conditions under which sequential budgets will or will not act as a binding constraint on the allocation of resource.

**TI** Efficient and Individually Rational Bayesian Mechanisms Only Exist on Perfectly Competitive Environments. **AU** Makowski, Louis; Ostroy, Joseph M.

### Otto, Glenn

**PD** July 1989. **TI** National Savings and Domestic Investment in the Long Run: Some Time Series Evidence for the U.S. and Canada. **AU** Otto, Glenn; Wirjanto, Tony. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 754; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 22. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** 441, 411. **KW** Capital Mobility. National Savings. Domestic Investment. Unit Root. International Finance.

**AB** An empirical puzzle in international finance is the finding of a high correlation between national savings and domestic investment. This result is widely interpreted as evidence of low international capital mobility. In this paper we examine the long run behavior of national savings and domestic investment for the United States and Canada in the time series context, by testing for evidence of co-integration between the two series. Overall we find little evidence of a co-integrating relationship between the levels of national savings and domestic investment, except for Canada during the Bretton Woods era.

### Owen, Joel

**TI** On the Existence of Franchise Contracts and Some of Their Implications. **AU** Katz, Barbara Goody; Owen, Joel.

### Panagariya, Arvind

**PD** February 1989. **TI** The Parallel Market in Centrally Planned Economies. **AA** University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 89-4; Department of Economics, University of Maryland, College Park, MD 20742. **PG** 34. **PR** no charge. **JE** 027, 021. **KW** Illegal Production. General Equilibrium. Centrally Planned Economies. Price Controls. Rationing.

**AB** This paper presents some general equilibrium models of the parallel market in centrally planned economies. The models are based on the hypotheses that private firms can operate more efficiently than bureaucratically-run state enterprises and that Soviet-type economies are characterized by price controls and quantitative allocations. Although the

welfare implications of the parallel market for workers are ambiguous in general, under a variety of circumstances they turn out to be negative. For instance, responding to the shortage created by price controls, illegal firms divert resources from the official economy into the parallel market. The result is a higher price in the parallel market without any increase in the total supply of the good.

**Panzer, John C.**

**TI** Public Utility Pricing and Capacity Choice under Risk: A Rational Expectations Approach. **AU** Coate, Stephen; Panzer, John C.

**Parke, William R.**

**TI** Asymptotic Likelihood Based Prediction Functions. **AU** Cooley, Thomas F.; Parke, William R.

**Parkinson, Martin A.**

**TI** Unemployment, Inflation, and Wages in the American Depression: Are there Lessons for Europe. **AU** Bermanke, Ben S.; Parkinson, Martin A.

**Patinkin, Don**

**PD** May 1989. **TI** Introduction to Abridged Edition of Money, Interest and Prices. **AA** Hebrew University of Jerusalem and University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 557; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 65. **PR** \$2.50. **JE** 023, 311, 111. **KW** Macroeconomics. Money Demand. Walras' Law.

**AB** 1. Disequilibrium Macroeconomics. 2. Walras' Law. 3. The Real Balance Effect. 4. The Microeconomic Basis of the Demand for Money. 5. Rational Expectations. 6. Open-economy Macroeconomics. 7. Money and Growth. 8. Concluding remarks. The "veil of money".

**PD** May 1989. **TI** On the General Theory. **AA** Hebrew University of Jerusalem and University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 558; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 33. **PR** \$2.50. **JE** 031, 023, 112, 042. **KW** Keynes. General Theory. Economic Development.

**AB** This is an introduction to a facsimile edition of the first edition of the General Theory that is being published by Verlag Wirtschaft and Finanzen, Dusseldorf, West Germany. The General Theory is placed in the context of the economic developments of the period during which it was written. Its central message is identified as the theory of effective demand in which changes in the level of income act as the force which equilibrates aggregate demand and supply. Brief discussions follow with respect to criticisms of the past years that stemmed from monetarism and from the new classical macroeconomics.

**Pau, Olivella**

**PD** July 1989. **TI** Information Structure and the Delegation of Monitoring. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 839; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 51. **PR** no charge. **JE** 512, 026. **KW** Incentives.

**Monitoring. Delegation. Commitment. Managerial Economics.**  
**AB** We explore a situation in which the (risk neutral) owner of a firm cannot commit ex-ante to monitor his (risk averse) workers. If the monitoring technology is capable of accusing a diligent worker of shirking (a "false positive"), the worker shirks in equilibrium with positive probability even if monitoring is costless. The owner alleviates this problem by delegating monitoring to a supervisor. Delegation is most effective if the monitoring technology is capable of producing false positives. Nevertheless, the owner may still benefit from delegation when false positives are impossible by contracting with a risk neutral supervisor.

**Payner, Brook S.**

**TI** Determining the Impact of Federal Antidiscrimination Policy on the Economic Status of Blacks: A Study of South Carolina. **AU** Heckman, James J.; Payner, Brook S.

**Pearce, David W.**

**PD** 1987. **TI** Marginal Opportunity Cost as a Planning Concept in Natural Resource Management. **AU** Pearce, David W.; Markandya, Anil. **AA** University College London. **SR** University College London Discussion Paper: 87-06; Department of Economics, University College London, Gower Street, London, WC1E 6BT, ENGLAND. **PG** 21. **PR** no charge. **JE** 721, 722, 024. **KW** Conservation. Natural Resources. Social Costs. Opportunity Cost.

**AB** Natural resource degradation is a profound problem in the developing world. One mechanism for correcting degradation is through the proper pricing of resources. The notion of 'marginal opportunity cost' is familiar as the sum of extraction, external and user costs. The paper shows how the concept can be used to analyze problems of over use of a renewable resource.

**TI** Natural Environments and the Social Rate of Discount. **AU** Markandya, Anil; Pearce, David W.

**TI** Natural Resource Degradation in Developing Countries: A Casual Analysis of Agricultural Colonisation. **AU** Southgate, Douglas; Pearce, David W.

**TI** The Social Costs of Tobacco Smoking. **AU** Markandya, Anil; Pearce, David W.

**Peracchi, Franco**

**PD** November 1987. **TI** Robust M-Tests. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 459; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 34. **PR** \$2.50; checks payable to U.C. Regents. **JE** 211. **KW** Robust Tests. M-estimators. Robustness.

**AB** This paper investigates the robustness properties of a general class of multi-dimensional tests based on M-estimators. These tests are shown to inherit the efficiency and robustness properties of the estimators on which they are based. In particular, it is shown that local misspecification of the distribution of the observations may have arbitrarily large effects on the asymptotic level and power of tests based on estimators that do not possess a bounded influence function. An asymptotic 'admissibility' result is also presented, that provides a justification for tests based on optimal bounded-influence estimators.

**Perl, Y.**

**TI** Most Uniform Path Partitioning and its Use in Image Processing. **AU** Lucertini, M.; Perl, Y.; Simeone, B.

**Pesaran, M. H.**

**TI** Aggregation Bias and Labor Demand Equations for the U. K. Economy. **AU** Lee, K.; Pesaran, M. H.; Pierse, R. G.

**Peters, Michael**

**TI** Self-Selection with Renegotiation. **AU** Hosios, Arthur; Peters, Michael.

**Pierce, David**

**PD** May 1989. **TI** Tolerance-Width Groupings for Editing Banking Deposits Data: An Analysis of Variance of Variances. **AU** Pierce, David; Bauer, Laura L. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 72; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. **PG** 22. **PR** no charge. **JE** 211, 223, 312. **KW** Banking. Financial Institutions. Financial Data.

**AB** For numerical editing of the data submitted to the U. S. Federal Reserve System by banks and other financial institutions, tolerance bands are constructed for groupings of institutions felt to be homogeneous by size, location, and type of institution. However, an objective measure of this homogeneity is not currently available, and the extremely large number of separate groups currently used frequently makes edit evaluation and development unwieldy. In carrying out this study we devise methods to deal with the problems of nonnormality and cell heteroskedasticity, which are encountered in the analyses of variance since the observations are themselves measures of dispersion.

**Pierse, R. G.**

**TI** Aggregation Bias and Labor Demand Equations for the U. K. Economy. **AU** Lee, K.; Pesaran, M. H.; Pierse, R. G.

**Pines, David**

**TI** A General Equilibrium Spatial Model of Housing Quality and Quantity. **AU** Arnott, Richard; Braid, Ralph; Davidson, Russell; Pines, David.

**Pippengor, John**

**TI** Testing Purchasing Power Parity. **AU** Davuignon, Nurhan; Pippengor, John.

**Pischke, Jorn Steffen**

**TI** The Effect of Social Security on Labor Supply: A Cohort Analysis of the Notch Generation. **AU** Krueger, Alan B.; Pischke, Jorn Steffen.

**Plosser, Charles**

**PD** September 1987. **TI** Stochastic Trends and Economic Fluctuations. **AU** Plosser, Charles; King, Robert G.; Stock, James; Watson, Mark. **AA** King and Plosser: University of Rochester. Stock: Stanford University. Watson: Northwestern University. **SR** University of Rochester Center for Research in Government Policy and Business Working Paper: 87-08; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY 14627. **PG** Not

available. **PR** NC single copy. **JE** 131. **KW** Stochastic Trends. Growth. Co-integration.

**AB** Recent developments in macroeconomic theory emphasize that transient economic fluctuations can arise as responses to changes in long-run factors, in particular technological improvement, rather than short-run factors. This contrasts with the view that short-run fluctuations and shifts in long-run trends are largely unrelated. We examine empirically the effect of shifts in stochastic trends that are common to several macroeconomic series. Using a linear time series model related to a VAR, we consider first a system with GNP, consumption and investment with a single common stochastic trend; we then examine this system augmented by money and prices and an additional stochastic trend.

**Polemarchakis, Herklis**

**TI** Observability and Optimality. **AU** Geanakoplos, John; Polemarchakis, Herklis.

**Popper, Steven W.**

**PD** August 1988. **TI** East European Reliance on Technology Imports from the West. **AA** Rand Corporation. **SR** Rand Report: R-3632; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. **PG** 52. **PR** no charge. **JE** 621, 423, 123. **KW** Technology. Imports. Europe. Developing Countries.

**AB** This report, an overview of current East European reliance on technology imports from the west, assesses the importance to the East Europeans of these imports. The study develops a measure to provide a relative scale of reliance on Western imports for a sample of high technology commodities for each of the six East European members of the Council for Mutual Economic Assistance (CMEA), the Soviet Union, and Yugoslavia, from 1980-1984.

**Porter, David**

**PD** June 1989. **TI** The Scope of Bargaining Failures with Complete Information. **AU** Porter, David; Rosenthal, Jean Laurent. **AA** Porter: California Institute of Technology. Rosenthal: University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 564; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 41. **PR** \$2.50. **JE** 026, 022. **KW** Bargaining. Negotiations. Complete Information. Dynamic Game.

**AB** This paper analyzes bargaining under the difference mechanism when there is complete information. There exists a multiplicity of equilibria, they all suffer from unsatisfactory properties. We focus on the completely mixed strategy equilibria but find that such equilibria require that the negotiator with the higher bargaining cost receive higher profits. Allowing the bargaining process to be dynamic does not entirely solve the problem because the offers in the dynamic game can demonstrate chaotic behavior. Moreover when failure costs are low there exist many infinite horizon C.M.S. equilibria. We find that there is significant probability of delay which is consistent with some empirical reality. Finally, if there is asymmetric information over bargaining costs, the negotiator with the higher bargaining costs obtains lower profits. Thus, asymmetric information leads to more plausible properties for most bargaining equilibria.

**Portes, Richard**

**TI** Dealing with Debt: The 1930s and the 1980s.  
**AU** Eichengreen, Barry; Portes, Richard.

**Poterba, James M.**

**PD** January 1989. **TI** Venture Capital and Capital Gains Taxation. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 2832; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** \$2.00. **JE** 522, 323, 511, 514. **KW** Capital Gains. Taxes. Investment. Capital.

**AB** This paper investigates the links between capital gains taxation and the level of venture capital activity. I examine two explanations of how reducing the personal capital gains tax rate may spur venture capital: the first focuses on the supply of funds to the venture industry, and the second on the supply of entrepreneurs. The supply of funds is unlikely to be the principal mechanism through which the tax affects venture capital, since less than half of venture investors face individual capital gains tax liability on their realized gains. Moreover, most of the growth in venture funding during the last decade has come from tax-exempt investors. Individual capital gains taxes may however have a significant influence on the demand for venture funds.

**PD** January 1989. **TI** Lifetime Incidence and the Distributional Burden of Excise Taxes. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 2833; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 11. **PR** \$2.00. **JE** 921, 323. **KW** Taxes. Alcohol. Excise Taxes. Households. Consumption.

**AB** Lifetime income is less variable than annual household income, since the latter reflects transitory shocks to wages, family status; and employment. This implies that low income households in one year have some chance of being higher income households in other years, and significantly affects the estimated distributional burden of excise taxes. This paper shows that household expenditures on gasoline, alcohol, and tobacco as a share of total consumption (a proxy for lifetime income) are much more equally distributed than expenditures as a share of annual income. From a longer-horizon perspective, excise taxes on these goods are therefore much less regressive than standard analyses suggest.

**TI** Second Mortgages and Household Saving.  
**AU** Manchester, Joyce M.; Poterba, James M.

**Powell, Andrew**

**TI** Securitization and Commodity Contingency in International Lending. **AU** Anderson, Ronald; Gilbert, Christopher; Powell, Andrew.

**Prescott, Edward C.**

**TI** Time Consistency and Policy. **AU** Chari, V. V.; Kehoe, Patrick J.; Prescott, Edward C.

**Purvis, Douglas D.**

**TI** Unemployment Insurance and Unemployment Dynamics. **AU** Milbourne, Ross D.; Purvis, Douglas D.; Scoones, W. David.

**Putterman, Louis**

**TI** Risk Preferences, Payment Schemes, and the Incentive Effects of Monitoring. **AU** Skillman, Gil Jr; Putterman, Louis.

**Quandt, Richard E.**

**TI** Input Rationing and Bailouts Under Central Planning. **AU** Goldfeld, Stephen M.; Quandt, Richard E.

**TI** Output Targets, the Soft Budget Constraint and the Firm Under Central Planning. **AU** Goldfeld, Stephen M.; Quandt, Richard E.

**Rajagopal, Dagmar**

**PD** June 1988. **TI** The Corporation Income Tax and the User Cost of Capital in the Canadian Pulp and Paper Industry. **AA** University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8810; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 38. **PR** Gratis (if in stock). **JE** 323, 522, 631. **KW** Income Tax. Corporate Taxes. Tax Rate. Capital Cost.

**AB** A short run and a long run model of the Canadian pulp and paper industry were each estimated twice: once with an expression for the user cost of capital that is free of the parameters of the Corporation Income Tax, once with an expression which does contain tax parameters. Then nonnested hypothesis tests were used to test these two expressions for the user cost of capital against each other. This is equivalent to testing the two assumptions against each other that the Corporation Income Tax either is or is not shifted forward completely in the short run.

**PD** June 1988. **TI** The Corporation Income Tax and the User Cost of Capital: A New Method to Test for Short-Run Forward Shifting of the Tax. **AA** University of Toronto. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8811; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 42. **PR** Gratis (if in stock). **JE** 323, 522. **KW** Income Tax. Corporate Taxes. Capital. Taxes.

**AB** It is shown in this paper that the expression for the user cost of capital is free of tax parameters under the assumption of complete short run forward shifting of the Corporation Income Tax, while it does contain tax parameters in the absence of full shifting. Testing these two expressions for the user cost of capital against each other in an econometric model is therefore equivalent to testing the alternative shifting assumptions against each other. A model of a limit pricing firm is specified to incorporate internal, nonseparable adjustment costs. Nested and nonnested hypothesis tests are described which can be used to test the two competing assumptions about short run tax shifting against each other.

**Rankin, Neil**

**PD** April 1989. **TI** Imperfect Competition, Expectations and the Effectiveness of Monetary Policy. **AA** Queen Mary College, London. **SR** Centre for Economic Policy Research Discussion Paper: 291; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 32. **PR** \$4.00. **JE** 023, 111. **KW** Imperfect Competition. Expectations. Monetary Policy.

**AB** A monetary overlapping generations model with oligopolistic imperfect competition is constructed. In general,

output and employment are below their full employment levels. Three alternative expectations hypotheses are used - 'adaptive', 'monetarist' and 'pure rational' - all of which ensure no expectations errors in the steady state. All three lead to different steady states, with contrasting output responses to the rate of monetary growth, despite constraining expectations to be 'rational' in the steady state. With imperfect competition of this type, rational expectations steady states themselves, and not just transition paths to the steady state, are dependent on the 'learning' process by which expectations are formed.

#### **Ray, Amit**

TI The Changing Structure of UK Production, Trade and Employment: An Analysis Using Input Output Tables 1974-84. AU Greenhalgh, Christine; Gregory, Mary; Ray, Amit.

#### **Razin, Assaf**

PD February 1989. TI Integration of the International Capital Markets: The Size of Government and Tax Coordination. AU Razin, Assaf; Sadka, Efraim. AA Tel Aviv University. SR National Bureau of Economic Research Working Paper: 2863; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR \$2.00. JE 441, 423, 323. KW Capital Market. International Trade. Economic Integration. Taxes. World Economy.

AB International-capital market integration has become a key policy issue in the prospective integration of Europe of 1992. In this context this paper provides a theoretical analysis of the effects of relaxing restrictions on the international flow of capital on the fiscal branch of government: the optimal provision of public goods, the structure of taxation and income redistribution policies. Concerning issues of interdependent economies the paper analyzes the scope of tax coordination.

TI International Effects of Tax Reforms. AU Frenkel, Jacob A.; Razin, Assaf.

TI International Spillovers of Taxation. AU Frenkel, Jacob A.; Razin, Assaf; Symansky, Steven.

#### **Rees, Daniel**

TI School District Leave Policies, Teacher Absenteeism, and Student Achievement. AU Ehrenberg, Ronald; Ehrenberg, Randy A.; Rees, Daniel; Ehrenberg, Eric.

#### **Reiss, Peter**

TI Cost-Reducing and Demand-Creating R&D with Spillovers. AU Levin, Richard; Reiss, Peter.

#### **Remolona, Eli**

TI Voluntary Conversions of LDC Debt. AU DiLeo, Paul; Remolona, Eli.

#### **Reuter, P. H.**

TI Measuring and Deterring Illegal Disposal of Hazardous Waste: A Preliminary Assessment. AU Hammitt, J. K.; Reuter, P. H.

#### **Revesz, Richard L.**

TI Apportioning Damages Among Potentially Insolvent Actors. AU Kornhauser, Lewis A.; Revesz, Richard L.

#### **Riddick, Leigh A.**

TI A Generalized Model of International Portfolio Diversification: Evaluating Alternative Specifications. AU Glassman, Debra A.; Riddick, Leigh A.

#### **Riordan, Michael H.**

TI Price and Quality in a New Product Monopoly. AU Judd, Kenneth L.; Riordan, Michael H.

#### **Roberds, Will**

TI How Little We Know About Budget Policy Effects. AU Miller, Preston J.; Roberds, Will.

#### **Robin, Jean Marc**

TI Frequency of Purchase and the Estimation of Demand Systems. AU Meghir, Costas; Robin, Jean Marc.

#### **Rodrigues, Anthony P**

TI Conditional Mean-Variance Efficiency of the U.S. Stock Market. AU Engel, Charles; Frankel, Jeffrey A.; Froot, Kenneth A.; Rodrigues, Anthony P.

#### **Roemer, John E.**

PD July 1989. TI A Welfare Comparison of Private and Public Monopoly. AU Roemer, John E.; Silvestre, Joaquim. AA University of California at Davis. SR University of California at Davis Economics Department Working Paper: 340; Department of Economics, University of California at Davis, Davis, CA 95616. PG 42. PR no charge. JE 024, 026, 612, 614. KW Regulation. Budget Constraint. Firm Ownership. Social Welfare. Public Ownership.

AB An industry is monopolized by one firm. We evaluate the social welfare contributed by the firm under various ownership and regulation regimes. We derive a specific social welfare function based on the assumption that the planner cares about the total size of the surplus and the equality of its distribution among the population. If privately owned, the firm can be either unregulated, or regulated a la Loeb-Magat-Baron-Myerson. If publicly owned, it can be regulated, subsidized, or un-subsidized. In both the private and public cases, the planner faces an agency problem vis-a-vis the firm's management.

#### **Rogoff, Kenneth**

TI Sovereign Debt Repurchases: No Cure for Overhang. AU Bulow, Jeremy; Rogoff, Kenneth.

#### **Romer, Paul M.**

TI Determinacy of Equilibria in Dynamic Models with Finitely Many Consumers. AU Kehoe, Timothy J.; Levine, David K.; Romer, Paul M.

#### **Rose, Nancy L.**

PD August 1988. TI The Diffusion of New Technologies: Evidence from the Electric Utility Industry. AU Rose, Nancy L.; Joskow, Paul L. AA Massachusetts Institute of Technology. SR National Bureau of Economic Research Working Paper: 2676; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 57. PR \$2.00. JE 621, 635, 616, 611. KW Firm Size. Utilities. Technology. Electricity. Factor Costs.

AB This paper investigates the effect of firm size and ownership structure on technology adoption decisions, using

data on the electric utility industry. We argue that traditional models of technology diffusion are subject to sample selectivity biases that may overstate the effect of firm size on adoption probabilities. By extending conventional hazard rate models to use information on both adoption and nonadoption decisions, we differentiate between firms' opportunities for adoption and their underlying adoption propensities.

**Rosen, Harvey S.**

**TI** Intertemporal Analysis of State and Local Government Spending: Theory and Tests. **AU** Holtz, Eakin Douglas; Rosen, Harvey S.

**TI** The "Rationality" of Municipal Capital Spending: Evidence from New Jersey. **AU** Holtz, Eakin Douglas; Rosen, Harvey S.

**Rosenthal, Jean Laurent**

**PD** May 1989. **TI** The Development of Irrigation in Provence: 1700-1860 The French Revolution and Economic Growth. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 560; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 41. **PR** \$2.50. **JE** 044, 112, 226. **KW** Irrigation. Transaction Costs. France. Property Rights. Economic Development. Economic Growth.

**AB** In order to assess the constraint on economic development in France prior to 1789, this paper investigates the causes of the Old-Regime's failure to develop irrigation by first considering whether irrigation was socially profitable. Because of the apparent high returns to an eighteenth-century extension of the irrigated area, the institutional obstacles to the construction of new canals are explored. The political division of authority allowed a variety of groups to hold a project up by using their veto power over rights of eminent domain. As a result, the transaction costs associated with irrigation development increased dramatically when projects crossed authority boundaries. Irrigation developers were forced to face these transactions costs because the state proved incapable of reform. The costs of securing rights of eminent domain were reduced by a series of institutional reforms enacted during the French Revolution.

**PD** May 1989. **TI** Settlement, Litigation and the Drainage of Marshes in England and France 1600-1789. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 561; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 40. **PR** \$2.50. **JE** 044, 112, 226, 026. **KW** Settlement. Litigation. Drainage. Economic Growth. Property Rights.

**AB** This paper presents an example of how careful use of game theory can help resolve significant historical questions. Specifically, historians and economists have long wondered why English agriculture grew faster than French agriculture during the period 1600-1800. A cause of French backwardness is examined: the legal constraints on the expansion of the cultivated area. The paper presents a game-theoretic model of litigation and settlement based on the legal rules governing conflicts over property rights to marshes. Because the allocation of property rights to marshes between lords and villages was based on uncertain medieval contracts, rules such as burden of proof were crucial to the disposition of cases. The

equilibrium features of the model are analyzed, and they suggest that English legal rules were more favorable to drainage than French rules. Thus different legal institutions may explain a good deal of the divergence in the agrarian development of Britain and France.

**TI** The Scope of Bargaining Failures with Complete Information. **AU** Porter, David; Rosenthal, Jean Laurent.

**Rosenthal, Robert W.**

**TI** Sovereign-Debt Renegotiations: A Strategic Analysis. **AU** Fernandez, Raquel; Rosenthal, Robert W.

**Roubini, Nouriel**

**PD** August 1988. **TI** Political and Economic Determinants of Budget Deficits in the Industrial Democracies. **AU** Roubini, Nouriel; Sachs, Jeffrey. **AA** Roubini: Yale University. Sachs: Harvard University. **SR** National Bureau of Economic Research Working Paper: 2682; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 54. **PR** \$2.00. **JE** 122, 322, 321, 113. **KW** Public Debt. Developed Countries. Budget Deficit. Taxes. Coalitions. Governments.

**AB** This paper focuses on the management of fiscal deficits and the public debt in the industrial democracies. Given the large deficits in many OECD countries in recent years, and the resulting sharp rise in the public debt, it is important to determine the economic and political forces leading to such large deficits. We find only partial support for the "equilibrium approach to fiscal policy", which assumes that tax rates are set over time in order to minimize the excess burden of taxation. Tax rates do not seem to be smoothed, and budget deficits in many countries in recent year appear to be too large to be explained by appeal to transitory increases in government spending.

**Ryder, Harl E.**

**TI** Bargaining with Costly Unilateral Replacement. **AU** Skillman, Gil Jr; Ryder, Harl E.

**TI** Dynamic Efficiency of Steady-State Equilibria in an Overlapping-Generations Model with Productive Capital. **AU** Galor, Oded; Ryder, Harl E.

**Sachs, Jeffrey**

**TI** The Debt Crisis: Structural Explanations of Country Performance. **AU** Berg, Andrew; Sachs, Jeffrey.

**TI** Political and Economic Determinants of Budget Deficits in the Industrial Democracies. **AU** Roubini, Nouriel; Sachs, Jeffrey.

**Sadka, Efraim**

**TI** Integration of the International Capital Markets: The Size of Government and Tax Coordination. **AU** Razin, Assaf; Sadka, Efraim.

**Sadorsky, Perry A.**

**PD** April 1989. **TI** Measuring Resource Scarcity in Non-Renewable Resources with Inequality Constrained Estimation. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 746; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 37. **PR** \$3.00 Canada and U.S.; \$3.50

Foreign. **JE** 721, 723. **KW** Inequality Constraints. Exploration Cost. Depletion. Oil. Natural Gas. Natural Resources.

**AB** In this paper annual Canadian Exploration data are used to estimate a multiple-output translog exploration cost function. A new definition of depletion is introduced and its estimated coefficient is found to be statistically significant. Another novel feature is the application of Monte Carlo integration to ensure the estimated cost function satisfies concavity and monotonicity. The fitted cost function parameters are then used to obtain estimates of the marginal costs of exploration for oil and gas. Our estimated marginal exploration costs are smaller than previous studies because we have allowed for technical progress which offsets the depletion effects. These marginal costs estimates are employed, along with previous estimates of exploration rents, to measure resource scarcity.

#### Safra, Zvi

**PD** June 1988. **TI** The Becker-DeGroot-Marschak Mechanism and Anticipated Utility: A Testable Approach. **AU** Safra, Zvi; Segal, Uzi; Spivak, Avia. **AA** Safra: Tel Aviv University, Israel. Segal: University of Toronto. Spivak: Ben Gurion University, Israel. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8809; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 19. **PR** Gratis (if in stock). **JE** 022. **KW** Lotteries. Mechanism Design. Utility Function.

**AB** The Becker-DeGroot-Marschak mechanism is widely used to elicit decision makers' selling prices of lotteries. This mechanism leads, however, to the preference reversal phenomenon, which seemed to indicate nontransitive preferences. To solve this puzzle Karni and Safra (1987) introduced a new interpretation of this mechanism based on two-stage lotteries without the independence axiom. In this paper we suggest a set of empirically testable hypotheses based on their interpretation of the mechanism. One of these tests can be used to find the utility and the probability transformation functions of an anticipated utility maximizer.

**PD** August 1988. **TI** Preference Reversals and Unexpected Utility Behavior. **AU** Safra, Zvi; Segal, Uzi; Spivak, Avia. **AA** Safra: Tel Aviv University, Israel. Segal: University of Toronto. Spivak: Ben Gurion University, Israel. **SR** University of Toronto Institute for Policy Analysis Working Paper: 8813; Department of Economics, University of Toronto, Toronto, Ontario, CANADA M5S 1A1. **PG** 17. **PR** Gratis (if in stock). **JE** 022, 026. **KW** Preferences. Utility Theory. Transitivity. Expected Utility. Lotteries.

**AB** The preference reversal phenomenon seemed to indicate nontransitive preferences. This phenomenon emerges when a decision maker prefers lottery A to B, but sets a higher selling price on B than on A. Recent works proved that this apparent nontransitive behavior strongly depends on the expected utility hypothesis and on the special mechanism used to find decision makers' selling prices of lotteries. When interpreted as a two-stage lottery, and either the independence axiom or the reduction of compound lotteries axiom is violated, this mechanism does not elicit decision makers' true certainty equivalents of lotteries. In this paper we show that the same conditions implying the preference reversal phenomenon also imply the Allais paradox and the common ratio effect.

#### Sahu, Anandi P.

**TI** The Fischer Equation Controversy: A Reconciliation of Contradictory Results. **AU** Jha, Raghendra; Sahu, Anandi P.; Meyer, Laurence H.

#### Saijo, Tatsuyoshi

**PD** November 1988. **TI** Incentive Compatible Mechanisms are not Individually Rational in Public Good Economies. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 18-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 10. **PR** no charge. **JE** 021, 022, 024. **KW** Public Goods. Pareto Equilibrium. Rationality.

**AB** Hurwicz's theorem states that Pareto optimality, individual rationality and incentive compatibility are inconsistent in a class of private goods economies. A similar result is obtained by Ledyard-Roberts in a class of public good economies. This paper presents a new impossibility result in a class of public good economies. Natural individual-rationality, which strengthens individual rationality in a natural way, and incentive compatibility are inconsistent. That is, the result can be interpreted that every participant's desire to be better off, i.e., natural individual-rationality, rather than Pareto optimality is a source of the impossibility.

**PD** January 1989. **TI** Boundary Optima and the Theory of Public Goods Supply: A Comment. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 17-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 11. **PR** no charge. **JE** 021, 022, 024. **KW** Equilibrium Allocation. Public Good. Pareto Equilibrium.

**AB** Campbell-Truchon provide a new generalized Samuelson condition that takes care of all interior and boundary Pareto optimal allocations. They observe that interior optima may be limit cases in the set of all Pareto optima. This comment shows that by using Kolm's triangle the phenomenon observed in public good economies is not special, but it can be found in private economies too.

#### Samet, Dov

**TI** Bertrand Competition with Subcontracting. **AU** Kamien, Morton I.; Li, Lode; Samet, Dov.

#### Sanchez, Nicolas

**TI** The Encomienda and the Optimizing Imperialist: An Interpretation of Spanish Imperialism in the Americas. **AU** Batchelder, Ronald W.; Sanchez, Nicolas.

#### Sapir, Andre

**PD** May 1989. **TI** Does 1992 Come Before or After 1990? On Regional versus Multilateral Integration. **AA** Universite Libre de Bruxelles. **SR** Centre for Economic Policy Research Discussion Paper: 313; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA United Kingdom. **PG** 29. **PR** \$4.00. **JE** 423, 422, 421, 432. **KW** Trade Policy. Economic Integration. Europe. Internal Market.

**AB** Although much has been written recently on the likely impact of 1992 on European economies, relatively little attention has been devoted to the external impact of the internal

market. Yet, given the importance of the Community in world trade, the completion of Europe's domestic market could exert a profound influence on nonmember countries. This paper examines the Community's external trade policy in the context of 1992. The first part presents the basic tools for analyzing the impact of integration on trade and welfare. The second part briefly reviews the experience of the first thirty years of European integration. The third part attempts to assess the external impact of 1992 in the light of theory and past experience. The last part looks at the interaction between 1992 and the Uruguay Round of GATT negotiations scheduled to be concluded in 1990.

**Scharfstein, David**

**TI** Corporate Structure, Liquidity and Investment: Evidence from Japanese Industrial Groups. **AU** Hoshi, Takeo; Kashyap, Anil; Scharfstein, David.

**TI** Bank Monitoring and Investment: Evidence from the Changing Structure of Japanese Corporate Banking Relationships. **AU** Hoshi, Takeo; Kashyap, Anil; Scharfstein, David.

**Schonfeld, Peter**

**TI** Experimental Design for Direct Metering of Residential Electricity End-Uses. **AU** Aigner, Dennis J.; Schonfeld, Peter.

**Schrader, Rainer**

**TI** Permutahedron of Series-Parallel Posets. **AU** Arnim, Annelie; Faigle, Ulrich; Schrader, Rainer.

**Schwartz, Anna J.**

**TI** Money Stock Targeting, Base Drift and Price-Level Predictability: Lessons from the U.K. Experience. **AU** Bordo, Michael; Choudhri, Ehsan U.; Schwartz, Anna J.

**Schwert, G. William**

**PD** March 1988. **TI** Heteroskedasticity in Stock Returns. **AU** Schwert, G. William; Seguin, Paul J. **AA** University of Rochester. **SR** University of Rochester Bradley Policy Research Center Working Paper: 88-02; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY 14627. **PG** Not available. **PR** No charge. **JE** 313, 131. **KW** Heteroskedasticity. Asset Pricing Model. Stock Returns. CAPM. Portfolio. Firm Size.

**AB** We use predictions of aggregate stock return variances to estimate time-varying monthly variances for size-ranked portfolios. We propose and test a single factor model of heteroskedasticity for portfolio returns. This model implies time-varying betas. Implications of heteroskedasticity and time-varying betas for tests of the Capital Asset Pricing Model (CAPM) are then documented. Accounting for heteroskedasticity increases the evidence that risk-adjusted returns are related to firm size. Further, a constant correlation model is proposed and tested. Disaggregate volatilities predicted by this model are similar to those predicted by more complex multivariate generalized-autoregressive-conditional-heteroskedasticity (GARCH) procedures.

**PD** April 1988. **TI** Tests for Unit Roots: A Monte Carlo Investigation. **AA** University of Rochester. **SR** University of Rochester Managerial Economics Research Center Working

Paper: 87-01; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY 14627. **PG** Not available. **PR** No charge. **JE** 211. **KW** Stationarity. ARIMA. Autoregressive Models. Unit Roots. Model Specification.

**AB** Recent work by Said and Dickey (1984,1985), Phillips (1987), and Phillips and Perron (1988) examines tests for unit roots in the autoregressive part of mixed autoregressive-integrated-moving average (ARIMA) models (tests for stationarity). Monte Carlo experiments show that these unit root tests have different finite sample distributions than the unit root tests developed by Fuller (1976) and Dickey and Fuller (1979, 1981) for autoregressive processes. In particular, the tests developed by Phillips (1987) and Phillips and Perron (1988) seem more sensitive to model misspecification than the high order autoregressive approximation suggested by Said and Dickey (1984).

**PD** June 1988. **TI** Why Does Stock Market Volatility Change Over Time?. **AA** University of Rochester. **SR** University of Rochester Bradley Policy Research Center Working Paper: 87-11; William E. Simon Graduate School of Business Administration, University of Rochester, Rochester, NY 14627. **PG** Not available. **PR** No charge. **JE** 313, 131. **KW** Stock Market. Volatility. Inflation. Interest Rates. Leverage. ARIMA.

**AB** This paper analyzes the relation of stock volatility with real and nominal macroeconomic volatility, financial leverage, stock trading activity, default risk, and firm profitability using monthly data from 1857-1986. An important fact, previously noted by Officer [1973], is that stock return variability was unusually high during the 1929-1940 Great Depression. Moreover, leverage has a relatively small effect on stock volatility. The amplitude of the fluctuations in aggregate stock volatility is difficult to explain using simple models of stock valuation.

**Scoones, W. David**

**TI** Unemployment Insurance and Unemployment Dynamics. **AU** Milbourne, Ross D.; Purvis, Douglas D.; Scoones, W. David.

**Segal, Uzi**

**TI** The Becker-Degroot-Marschak Mechanism and Anticipated Utility: A Testable Approach. **AU** Safra, Zvi; Segal, Uzi; Spivak, Avia.

**TI** Mixture Symmetric Utility Theory. **AU** Chew, S. H.; Epstein, Larry G.; Segal, Uzi.

**TI** Preference Reversals and Unexpected Utility Behavior. **AU** Safra, Zvi; Segal, Uzi; Spivak, Avia.

**PD** February 1989. **TI** Two Stage Lotteries Without the Reduction Axiom. **AA** University of Toronto. **SR** University of California at Los Angeles Department of Economics Working Paper: 552; Department of Economics - UCLA, Los Angeles, CA 90024. **PG** 57. **PR** \$2.50. **JE** 026. **KW** Expected Utility. Compound Lotteries. Lotteries. Preferences.

**AB** This paper analyzes preference relations over two-stage lotteries, i.e., lotteries having as outcomes tickets for other, simple, lotteries. Empirical evidence indicates that decision makers do not always behave in accordance with the reduction of compound lotteries axiom, but it seems that they satisfy a

compound independence axiom (also known as the certainty equivalent mechanism). It turns out that although the reduction and the compound independence axioms together with continuity imply expected utility theory, each of them by itself is compatible with all possible preference relations over simple lotteries. By using these axioms I analyze three different versions of expected utility for two-stage lotteries. The second part of the paper is devoted to possible replacements of the reduction axiom. For this I suggest several different compound dominance axioms.

### Seguin, Paul J.

TI Heteroskedasticity in Stock Returns. AU Schwert, G. William; Seguin, Paul J.

### Sengupta, Jati K.

PD January 1989. TI How to Measure Portfolio Efficiency? A Critique. AA University of California, Santa Barbara. SR University of California at Santa Barbara Department of Economics Working Paper: 1-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. PG 31. PR no charge. JE 311, 313. KW Portfolios. Finance. Capital Market. Portfolio Theory. Market Efficiency.

AB The concept of mean variance efficiency widely used in portfolio theory of modern finance is examined here in terms of (a) its limitations in statistical and empirical applications, (b) and the alternative nonparametric measures. The nonparametric measures and tests of portfolio efficiency raise some of the most fundamental issues of modern financial economics today and these are shown to have valuable implications for the theory of capital market efficiency.

PD March 1989. TI Some Issues in Commodity Stabilization Policies. AA University of California, Santa Barbara. SR University of California at Santa Barbara Department of Economics Working Paper: 12-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. PG 10. PR no charge. JE 611, 133, 421. KW Stabilization Policy. Oligopoly. Cartels. International Trade.

AB Three macrodynamic issues of stabilization policy are discussed here, e.g., (a) the presence of oligopolistic or cartelized markets, (b) the benefits of diversification between primary, secondary and tertiary commodities and (c) the gains of coordination and cooperation when the trade interdependence generates various instabilities. Some empirical illustrations from the world coffee economy and the Asian Pacific Rim region are utilized to highlight these theoretical issues.

TI Nonparametric Tests of Portfolio Efficiency Under Static and Dynamic Conditions. AU Dumas, E. B.; Sengupta, Jati K.

PD August 1989. TI Market Structure Implications of Instability in the World Coffee Market. AU Sengupta, Jati K.; Wang, Eric. AA University of California, Santa Barbara. SR University of California at Santa Barbara Department of Economics Working Paper: 32-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. PG 29. PR no charge. JE 715, 431. KW Coffee. Market Power. Prices. Exports.

AB This paper estimates an econometric model for the world coffee market in order to test the effects of varying market

power on the choice of optimal storage and the degree of instability in prices and export revenues. The empirical results show that for those markets where agents have significant market power, there exists a significant tradeoff between the price and export earnings instability.

### Serrato, Carl

TI Hospital Costs and Patient Access under the New Jersey Hospital Rate-Setting System. AU Melnick, Glenn; Mann, Joyce; Serrato, Carl.

### Shafer, Wayne

TI Solving Systems of Simultaneous Equations in Economics. AU Geanakoplos, John; Shafer, Wayne.

### Shah, C.

TI Multi-Series Heuristics for Exponential Smoothing. AU Snyder, R.; Shah, C.; Lehmer, C.

### Shallcross, David

PD June 1989. TI Neighbors of the Origin for Four by Three Matrices. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 916; Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. PG 11. PR no charge. JE 213. KW Integer Programming. Neighborhood Systems.

AB Scarf has defined a neighborhood system for families of integer programs where the right-hand side is allowed to vary. This system depends on a matrix A of constraint and objective function coefficients of the integer programs. This paper characterizes the set of neighbors of the origin when A is four by three; showing that it may be described as the set of integer vectors in a union of two-dimensional polyhedra, where the number of polyhedra is quadratic in the bit size of A.

### Sharpe, Steven A.

PD April 1989. TI A Theory of Credit Rationing and the Maturity Structure of Debt. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 17; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. PG 33. PR no charge. JE 521, 315, 514. KW Credit Rationing. Interest Rates. Capital Structure. Debt. Loans.

AB We construct a model in which creditors have the ability to observe a firm's progress midstream, and thus, can offer either short- or long-term loans. When a firm chooses the former and does poorly early on, their creditors may either rollover or discontinue their loans, forcing the firm to find new creditors or to liquidate. Thus, with short-term lending, the firm may be credit-rationed after its progress is observed. Rolling over short-term debt is often a problem because, when the firm's value is low and future bankruptcy more likely, creditors require a high risk premium. Long-term debt may be a more efficient form of financing because it enables the creditor to shift some of the loan repayment from bad states to good states without complicated contingent contracting.

PD May 1989. TI Asymmetric Information, Bank Lending, and Implicit Contracts: A Stylized Model of Customer Relationships. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal

Reserve System Finance and Economics Discussion Series: 70; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. PG 33. PR no charge. JE 312, 314, 315. KW Banking. Implicit Contracts. Customer Relationships. Intermediation. Loans. Creditors.

AB This paper derives a dynamic theory of "customer relationships" in bank loan markets. Such relationships arise because, in the process of lending, a bank learns more than other banks about its own customers. Rents generated by older, high quality firms are partially captured by their original lenders because of this information asymmetry. As a result, competition drives banks to lend to new firms at rates which initially generate expected losses, and the allocation of capital is shifted toward low quality and inexperienced firms. The inefficiencies are eliminated if firms can write complete contingent contracts with their banks. Because such contracting is costly and difficult, and frequently absent from long-term economic relationships, we explore the role of "implicit," or non-binding, contracts backed by lender reputation.

**Shiller, Robert J.**

PD February 1989. TI Comovements in Stock Prices and Comovements in Dividends. AA Yale University. SR National Bureau of Economic Research Working Paper: 2846; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 15. PR \$2.00. JE 313, 311. KW Information. Speculation. Asset Pricing. Efficient Markets.

AB Simple efficient markets models imply that the covariance between prices of speculative assets cannot exceed the covariance between their respective fundamentals unless there is positive information pooling. Positive information pooling occurs when there is more information, in a sense defined here, about the aggregate of the fundamentals than there is about the individual fundamentals. With constant discount rates, the covariance between prices (detrended by dividing by a moving average of lagged dividends) in the U.K. and the U.S. exceeds the covariance of the measure of fundamentals, and there is no evidence of positive information pooling.

**Shleifer, Andrei**

TI The Size and Incidence of the Losses from Noise Trading. AU De Long, J. Bradford; Shleifer, Andrei; Summers, Lawrence; Waldmann, Robert.

**Sickles, Robin C.**

PD April 1989. TI Technical Inefficiency and Productive Decline in the U.S. Interstate Natural Gas Pipeline Industry Under the Natural Gas Policy Act. AU Sickles, Robin C.; Streitwieser, Mary L. AA Rice University. SR New York University Economic Research Reports: 89-20; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 30. PR none. JE 226, 635, 613. KW Productivity. Natural Gas. Regulation. Firm Size.

AB The purpose of this paper is to examine the primal production technology of the interstate natural gas pipeline industry during a period (1977-85) in which the industry faced severe changes in the regulatory environment. We utilize a newly constructed panel data set of firms that comprise almost 90% of the industry. We find that during the first six years of

partial price deregulation, there was a marked decline in productivity. The only firms which maintained positive productivity rates were those with relatively large and growing transport services for others. We also find that firm-specific average efficiency rankings were strongly and negatively correlated with firm size.

**Silvestre, Joaquim**

TI A Welfare Comparison of Private and Public Monopoly. AU Roemer, John E.; Silvestre, Joaquim.

**Simeone, B.**

TI Most Uniform Path Partitioning and its Use in Image Processing. AU Lucertini, M.; Perl, Y.; Simeone, B.

**Simon, Carol J.**

PD May 1989. TI Ownership Concentration and the Market for Corporate Control. AA University of California, Los Angeles and University of Chicago. SR University of California at Los Angeles Department of Economics Working Paper: 568; Department of Economics, University of California, Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 23. PR \$2.50. JE 511, 611. KW Ownership Structure. Corporate Control. Takeovers.

AB This paper examines the forces which affect the equilibrium structure of corporate ownership. Empirical findings suggest that the level of ownership concentration and changes in ownership concentration respond to factors which are related to the firm's derived demand for monitoring. There is substantial evidence that ownership structure changes in advance of announcements of takeover bids, and that the level of block shareholdings may facilitate the market for corporate control. There is also evidence that large adjustments may substitute for takeovers. Discussion focuses on ways to separate the efficiency responses of ownership concentration from entrenchment theories.

PD July 1989. TI The Role of Reputation in the Market for Initial Public Offerings. AA University of California, Los Angeles and University of Chicago. SR University of California at Los Angeles Department of Economics Working Paper: 569; Department of Economics - UCLA, Los Angeles, CA 90024. PG 27. PR \$2.50. JE 522, 313. KW Public Offerings. Signalling. Reputation.

AB This paper examines the returns to seller reputation in the market for initial public offerings. Investors adaptively learn about the quality of new issues by observing the past quality of issues underwritten by specific investment bankers. Underwriters are hypothesized to invest in intangible (reputation) capital to signal the production of high quality issues. Investment takes the form of underpricing in periods where the firm lacks an established reputation. A competitive return on the acquisition reputation capital is enjoyed in subsequent periods.

**Sinclair, Peter**

PD 1989. TI Is Fiscal Expansion Inflationary?. AA Brasnose College, Oxford. SR Oxford Applied Economics Discussion Paper: 64; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. PG 32. PR no charge. JE 227, 321, 322, 134. KW United Kingdom. Fiscal Policy. Government Spending.

AB This paper examines the effect of fiscal expansion on the

price level. There is a variety of reasons for thinking that it could be initially disinflationary. President Reagan's fiscal policies in the United States - the only large economy in the world to have reduced both inflation and unemployment since the early 1980s, and the only one to have witnessed major fiscal expansion - appear to furnish an important contemporary instance of this. But in the United Kingdom, at least, it seems that increased government expenditure exerts upward pressure on prices. This confirms what one would expect the longer run consequences of fiscal expansion to include.

### Skillman, Gil Jr

PD January 1988. TI Risk Preferences, Payment Schemes, and the Incentive Effects of Monitoring. AU Skillman, Gil Jr; Putterman, Louis. AA Brown University. SR Brown University Department of Economics Working Paper: 88-6; Department of Economics, Brown University, Providence, RI 02912. PG 23. PR No charge. JE 824, 821. KW Monitoring. Wages. Labor Force.

AB This paper analyzes the incentive effects of monitoring as a noisy signal of labor effort when the firm is limited to two types of compensation, fixed wages and profit shares. We find that such restrictions on the firm's choice of payment may hinder the attainment of positive incentive effects from increased monitoring. The severity of this constraint may be alleviated if the firm has the power of conditional dismissal. Our results are then compared to those for the case in which monitoring produces an accurate signal of effort, but with a probability which depends on the intensity of monitoring effort. Implications for the structure of firms are discussed.

PD June 1988. TI Bargaining with Costly Unilateral Replacement. AU Skillman, Gil Jr; Ryder, Harl E. AA Brown University. SR Brown University Department of Economics Working Paper: 88-17; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 17. PR No charge. JE 026, 833. KW Bargaining. Sequential Game. Subgame Equilibrium.

AB Bargaining relationships are studied in which one party enjoys the unique but costly power to replace its opponent. The problem is modelled as a noncooperative sequential bargaining game and the set of subgame perfect equilibrium payoffs is completely characterized. Unique equilibria exist only for values of replacement cost which are respectively high and low relative to the surplus to be shared. Applications to the study of unions and the structure of firms are considered.

PD May 1989. TI Why are Capitalists the Bosses?: A Comment on Eswaran and Kotwal. AA Brown University. SR Brown University Department of Economics Working Paper: 89-17; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 10. PR No charge. JE 022, 611, 026. KW Firm Theory. Credit Market. Moral Hazard. Bargaining Theory.

AB Why is it typically the case that capital hires labor and not vice-versa? Eswaran and Kotwal (1989) argue that this phenomenon is better explained by the presence of moral hazard in credit markets than by power considerations, as suggested by the radical or conflict theory of the firm. This comment defends the conflict approach using the tools of noncooperative bargaining theory and suggests that the conflict approach provides a more satisfactory account of the phenomenon.

### Skinner, Jonathan

PD February 1989. TI Housing Wealth and Aggregate Saving. AA University of Virginia. SR National Bureau of Economic Research Working Paper: 2842; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR \$2.00. JE 932, 921, 931. KW Housing. Bequests. Families. Households.

AB The recent appreciation in housing value can have large effects on aggregate saving. This paper uses a simulation model to show that aggregate saving will decline substantially if life cycle homeowners spend down their housing windfalls. Homeowners with a bequest motive, however, may save more to assist their children in buying the now more expensive housing. To test whether families spend their housing capital gains, I use housing, income, and consumption data from the Panel Study of Income Dynamics. While a cross section time series regression implies that housing wealth does affect saving, a fixed effects model finds no effect.

TI Sources of IRA Saving. AU Feenberg, Daniel; Skinner, Jonathan.

### Smith, James P.

TI Computing Economic Loss in Cases of Wrongful Death. AU King, Elizabeth M.; Smith, James P.

TI Economic Loss and Compensation in Aviation Accidents. AU King, Elizabeth M.; Smith, James P.

TI Dispute Resolution following Airplane Crashes. AU King, Elizabeth M.; Smith, James P.

### Sneed, John D.

TI Coherent Methods of Estimating Technical Progress. AU Swamy, PAVB; Lupo, Leonard A.; Sneed, John D.

### Snyder, R.

PD January 1989. TI Multi-Series Heuristics for Exponential Smoothing. AU Snyder, R.; Shah, C.; Lehmer, C. AA Monash University. SR Monash Department of Econometrics Working Paper: 1/89; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 21. PR no charge. JE 211, 132. KW Time Series. Exponential Smoothing. Forecasting.

AB In this paper several heuristics are proposed for calculating the smoothing parameter in exponential smoothing when forecasts of many 'closely' related series are required on a regular basis. The methods are evaluated using both synthetic and real data. They not only compare favorably against several other known forecasting techniques but they are also simple and computationally efficient.

### Sokoloff, Kenneth L.

PD August 1988. TI Inventive Activity in Early Industrial America: Evidence from Patent Records, 1790-1846. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 499; Department of Economics - UCLA, Los Angeles, CA 90024. PG 54. PR \$2.50. JE 042, 621, 226. KW Patents. Invention. Industrialization. Productivity.

AB A sample of patent records from the United States between 1790 and 1846 is employed to study the patterns in inventive activity. Patenting was procyclical, and yet began to grow rapidly with the interruptions in foreign trade that

preceded the War of 1812. A strong association between patenting and proximity to navigable waterways is also demonstrated. Although the importance of specific mechanisms remains unclear, both the temporal and cross sectional evidence imply that inventive activity was positively related to the growth of markets during early industrialization.

#### Sonstelie, Jon

**TI** Price Controls and Rent Dissipation with Endogenous Transactions Costs. **AU** Deacon, Robert; Sonstelie, Jon.

#### Southgate, Douglas

**PD** July 1987. **TI** Natural Resource Degradation in Developing Countries: A Casual Analysis of Agricultural Colonisation. **AU** Southgate, Douglas; Pearce, David W. **AA** Southgate: Ohio State University. Pearce: University College London. **SR** University College London Discussion Paper: 87-26; Department of Economics, University College London, Gower Street, London, WC1E 6BT, ENGLAND. **PG** 26. **PR** no charge. **JE** 721, 722, 716, 717. **KW** Agriculture. Natural Resources. Farmers. Forests.

**AB** Deforestation through agricultural clearance is a major cause for concern. This paper establishes a model of land use by small farmers in order to show the conditions under which farmers will choose to 'colonize' new areas of forest. It is shown that farmers will rationally deforest if the net returns to colonization exceed those from land improvement, and that such conditions are highly likely to prevail in many developing countries characterized by 'frontier' agriculture.

#### Spiegel, Matthew

**TI** An Experimental Comparison of Alternative Arbitration Systems. **AU** Currie, Janet M.; Ashenfelter, Orley; Spiegel, Matthew.

#### Spivak, Avia

**TI** The Becker-DeGroot-Marschak Mechanism and Anticipated Utility: A Testable Approach. **AU** Safra, Zvi; Segal, Uzi; Spivak, Avia.

**TI** Preference Reversals and Nonexpected Utility Behavior. **AU** Safra, Zvi; Segal, Uzi; Spivak, Avia.

#### Staiger, Robert W.

**TI** Adverse Selection in Credit Markets and Infant Industry Protection. **AU** Flam, Harry; Staiger, Robert W.

**PD** June 1989. **TI** Strategic Use of Antidumping Law to Enforce Tacit International Collusion. **AU** Staiger, Robert W.; Wolak, Frank A. **AA** Stanford University. **SR** Stanford Hoover Institute Working Paper in Economics: E-89-20; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 62. **PR** no charge. **JE** 411, 422, 421. **KW** Dumping. Tacit Collusion. Market Share. Market Power. Domestic Industry.

**AB** We consider the impact of domestic antidumping law in a two-country partial equilibrium model where domestic and foreign firms tacitly collude in the domestic market. Firms engage in an infinitely repeated game, with each period composed of a two-stage game. In the first stage each firm chooses capacity before stochastic domestic demand is realized. In the second stage, after demand is realized, each firm then sets price. We show that the introduction of domestic

antidumping law typically leads to the filing of antidumping suits by the domestic industry in low demand states, and to more successful collusion and greater market share for domestic firms during periods of low demand as a result. This occurs in spite of the fact that antidumping duties are never actually imposed.

#### Stapleton, R. C.

**PD** July 1988. **TI** The Intertemporal Behavior of Asset Prices and the Equivalent Martingale Measure for the Valuation of Contingent Claims. **AU** Stapleton, R. C.; Subrahmanyam, M. G. **AA** Stapleton: University of Lancaster. Subrahmanyam: New York University. **SR** New York University Salomon Brothers Center Working Paper: 499; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 20. **PR** no charge. **JE** 313, 311. **KW** Martingale. Risky Assets. Asset Pricing. Option Pricing. Capital Market.

**AB** Under risk aversion, Harrison and Kreps (1979) show that risky assets can be valued using a risk adjusted probability distribution-the equivalent martingale measure. In this paper, we look at the conditions under which the mapping from the actual conditional probability distribution to the conditional martingale measure is nonstochastic. We also investigate the relationship between the existence of the equivalent martingale measure and the risk neutral valuation relationship used in option pricing. As an implication of our basic results, we show the conditions under which the value of an "at the money" option relative to the value of the underlying asset is nonstochastic.

#### Stark, Oded

**TI** The Impact of Differences in the Levels of Technology on International Labor Migration. **AU** Galor, Oded; Stark, Oded.

#### Starr, Ross M.

**TI** The Transactions Role of Money. **AU** Ostroy, Joseph M.; Starr, Ross M.

#### Steigerwald, Doug

**PD** January 1989. **TI** Adaptive Estimation in Time Series Regression Models. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 7-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 58. **PR** no charge. **JE** 211. **KW** Linear Regression Model. Estimators. Serial Correlation. Minimax Estimators.

**AB** This work develops adaptive estimators for a linear regression model with serially correlated errors. When the actual distribution of the white noise process is unknown, locally asymptotic minimax estimators can be derived under mild shape restrictions on the unknown density.

#### Stein, Jerome L.

**PD** October 1987. **TI** Speculative Markets and Macroeconomic Controversy. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 87-19; Department of Economics, Brown University, Providence, RI 02912. **PG** 27. **PR** No charge. **JE** 023, 031. **KW** Speculation. Macroeconomics. Economic Thought.

Monetarism. Keynesians.

**AB** First, the macroeconomic controversies between the Monetarists, Keynesians and New Classical Economists are discussed and evaluated to determine the sources of the disagreements; and the results of simultaneous tests of alternative hypotheses are summarized. Second, the theories and evidence derived from the studies of speculative markets are brought to bear upon the macroeconomic controversies. The evidence from speculative markets, discussed in the second part, concerning the anticipations hypotheses, is consistent with the empirical results on the macro level discussed in the first part.

**PD** August 1988. **TI** Cobwebs, Rational Expectations and Futures Markets. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 88-18; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 23. **PR** No charge. **JE** 715, 313. **KW** Futures Markets. Commodities. Rational Expectations. Cobweb Cycle.

**AB** Part I describes the evidence which suggests that, in the absence of future markets, cobweb cycles and other behavior inconsistent with Muth Rational Expectations (MRE) persist for long periods of time in commodity markets. When future markets are introduced, then the same markets behave in a manner more consistent with MRE. Part II proposes an explanation of why non-rational behavior, such as cobwebs, tend to occur in the absence of futures. Part III explains how futures markets change the structure of the supply response.

### Steinberg, Dan

**TI** A Discrete Choice Contingent Valuation Estimate of the Value of Kenai King Salmon. **AU** Carson, Richard T.; Hanemann, Michael; Steinberg, Dan.

### Stekler, Lois

**PD** February 1989. **TI** Adequacy of International Transactions and Position Data for Policy Coordination. **AA** Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Working Paper: 2844; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** \$2.00. **JE** 221, 431, 321. **KW** Current Account. Investment. Microdata. Public Debt. Government Policy.

**AB** This paper examines the adequacy of data on current accounts and international indebtedness as measures of the need for policy adjustments and coordination. Doubts about the adequacy of these data have been raised by the growth of the global current account discrepancy and the statistical discrepancy in the U.S. international transactions accounts. The paper includes a brief review of the conclusions of the IMF working party on the world current account discrepancy and a detailed examination of the data on U.S. international transactions and net investment position. Both investigation support the conclusion that large shifts in reported data on current accounts and investment positions are likely to reflect real changes.

### Stewart, Geoff

**PD** June 1989. **TI** Capital Ownership and the Employment Relation. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 8907; Department of Economics, University of Southampton, Southampton S09 5NH,

ENGLAND. **PG** 26. **PR** No charge. **JE** 514, 521, 522. **KW** Asset Ownership. Business Investment. Business Finance. Efficient Markets.

**AB** A number of recent papers offer efficiency-based explanations of the pattern of asset ownership. We present a different picture. The key prediction is a tendency for assets to be owned by people with ideas. Also, the amount purchased may or may not be efficient. Our starting point is the recognition that the formation of a firm frequently represents an attempt by an individual to secure a return on an idea, or information. But this may then inevitably pass to other members of the firm. However, the initial possessor of information can make the first move on asset ownership and, within the employment relation, this can confer a strategic advantage.

### Stiglitz, Joseph E.

**PD** January 1989. **TI** Money, Credit and Business Fluctuations. **AA** Stanford University. **SR** National Bureau of Economic Research Working Paper: 2823; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** \$2.00. **JE** 315, 131, 312, 023. **KW** Economic Fluctuations. Credit. Banking. Monetary Policy.

**AB** This paper provides a critique of standard theories of money, in particular those based on money as a medium of exchange. Money is important because of the relationship between money and credit. The process of judging credit worthiness, in which banks play a central role, involves the collection and processing of information. Like many other economic activities involving information, these processes are not well described by means of standard production functions. This alternative view has number of implications for policy, both at the macroeconomic level (for instance, on the role of monetary policy for stabilization purposes and the choice of targets) and at the microeconomic level.

### Stock, James

**TI** Stochastic Trends and Economic Fluctuations. **AU** Plosser, Charles; King, Robert G.; Stock, James; Watson, Mark.

### Stockman, Alan C.

**PD** April 1988. **TI** Real Exchange Rate Variability Under Pegged and Floating Nominal Exchange Rate Systems: An Equilibrium Theory. **AA** University of Rochester. **SR** University of Rochester Center for Economic Research Working Paper: 128; Department of Economics, University of Rochester, Rochester, NY 14627. **PG** 53. **PR** no charge. **JE** 431, 432, 422, 411. **KW** Exchange Rate. Monetary Policy. Debt Crisis. Devaluation.

**AB** This paper proposes a new explanation for the greater variability of real exchange rates under pegged than under floating nominal exchange rate systems. The explanation hinges on the propensity of governments to use international trade restrictions and financial restrictions for balance-of-payments purposes under pegged exchange rates. In particular, these restrictions become more likely during periods of time when countries suffer losses of international reserves than might, without policy changes, lead to a balance-of-payments crisis. This covariation of restrictions with reserve changes implies that real exchange rates will vary less under pegged than under floating exchange rates.

**Streitwieser, Mary L.**

**TI** Technical Inefficiency and Productive Decline in the U.S. Interstate Natural Gas Pipeline Industry Under the Natural Gas Policy Act. **AU** Sickles, Robin C.; Streitwieser, Mary L.

**Stuart, Charles**

**TI** Taxes and Aggregate Labor Supply: A Cross-Country General Equilibrium Study. **AU** Hansson, Ingemar; Stuart, Charles.

**TI** Malthusian Selection of Preferences. **AU** Hansson, Ingemar; Stuart, Charles.

**TI** Social Security as Trade Among Living Generations. **AU** Hansson, Ingemar; Stuart, Charles.

**Subrahmanyam, M. G.**

**TI** The Intertemporal Behavior of Asset Prices and the Equivalent Martingale Measure for the Valuation of Contingent Claims. **AU** Stapleton, R. C.; Subrahmanyam, M. G.

**Summers, Lawrence**

**TI** The Size and Incidence of the Losses from Noise Trading. **AU** De Long, J. Bradford; Shleifer, Andrei; Summers, Lawrence; Waldmann, Robert.

**Swaminathan, Madhura**

**PD** February 1989. **TI** Household Wealth Mobility and its Implications for Policy: An Illustration from a South Indian Village. **AA** Somerville College, Oxford. **SR** Oxford Applied Economics Discussion Paper: 66; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL. **PG** 24. **PR** no charge. **JE** 921, 121, 113, 941, 914. **KW** Wealth. Mobility. India. Economic Development.

**AB** This paper examines a dynamic aspect of the distribution of wealth, namely mobility in terms of ownership of wealth at the household level. The investigation stems from a concern with changes in the long run well being of individuals. The matrix approach is identified as a suitable method of obtaining a good descriptive characterization of mobility. A supplementary distance measure is proposed, one that gives greater weight to mobility among the relatively poor. These measures are applied to an 8-year panel data set from a south Indian village. Empirical estimates show that restricted mobility in this village are then used to illustrate the implications of mobility for development policy.

**Swamy, PAVB**

**PD** June 1989. **TI** Coherent Methods of Estimating Technical Progress. **AU** Swamy, PAVB; Lupo, Leonard A.; Sneed, John D. **AA** Swamy: Federal Reserve Board. Lupo: Department of Commerce. Sneed: The Sorites Group. Inc. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 77; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. **PG** 19. **PR** no charge. **JE** 621, 212, 023. **KW** Production Functions. Stochastic Coefficients. Technical Progress. Coherence. Duality.

**AB** Separate estimation of production and cost functions can give contradictory results unless regularity conditions given by Shephard's duality theorem are satisfied, and the distributions assumed for the error terms of these functions are consistent with respect to the system of rules of statistical inference. The

paper demonstrates that such contradictory results can be avoided by using a production function with stochastic parameters. Finally, the paper discusses some uses and properties of this production function.

**Symansky, Steven**

**TI** International Spillovers of Taxation. **AU** Frenkel, Jacob A.; Razin, Assaf; Symansky, Steven.

**Symons, James**

**TI** Ten Years of Mrs. T. **AU** Bean, Charles; Symons, James.

**Tan, Guofu**

**PD** June 1989. **TI** Incentive Procurement Contracts with Costly R&D. **AA** California Institute of Technology. **SR** Caltech Social Science Working Paper: 702; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 41. **PR** no charge. **JE** 621, 322, 522. **KW** Government Contracts. Procurement. R&D.

**AB** This paper provides a model of both R&D and production in procurement processes where firms invest in R&D and compete for a government procurement contract. The optimal incentive procurement contract is characterized to maximize the government's expected welfare. Explicit consideration of the R&D process changes the standard results in several ways. If the traditional Baron-Myerson (1982) type contract is used where there is costly R&D, the government buys too little from the contractor and pays too little. Raising the price paid encourages private R&D and raises the government's welfare. The form of the optimal procurement contract depends on the number of firms. With R&D and optimal procurement the government prefers more than one firm to invest in R&D and to bid for the production contract. But too much competition may discourage private R&D investment and leave the government worse off. Other features of optimal procurement and R&D expenditures are also discussed.

**Taylor, John B.**

**TI** Full Information Estimation and Stochastic Simulation of Models with Rational Expectations. **AU** Fair, Ray C.; Taylor, John B.

**Teranishi, Juro**

**TI** News and the Dollar/Yen Exchange Rate, 1931-1933: The End of the Gold Standard, Imperialism, and the Great Depression. **AU** Ito, Takatoshi; Okina, Kunio; Teranishi, Juro.

**Thompson, Earl A.**

**TI** A New Interpretation of Guilds, Tariffs, and Laissez-Faire. **AU** Hickson, Charles R.; Thompson, Earl A.

**TI** The Historical Efficiency of European Guilds. **AU** Hickson, Charles R.; Thompson, Earl A.

**Tracy, Joseph S.**

**TI** Market Structure, Strike Activity, and Union Wage Settlements. **AU** Abowd, John M.; Tracy, Joseph S.

**Trejo, Stephen**

**PD** January 1989. **TI** Compensating Differentials and

Overtime Pay Regulation. AA University of California, Santa Barbara. SR University of California at Santa Barbara Department of Economics Working Paper: 2-89; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. PG 44. PR no charge. JE 822, 824, 821. KW Overtime. Employment. Wage Differentials. Labor Demand.

AB In addition to setting the federal minimum wage, the Fair Labor Standards Act requires that an overtime wage of at least one and one-half times the straight-time wage be paid for weekly hours worked in excess of forty. According to previous analyses of these overtime pay provisions, the statutory overtime premium raises the marginal cost of overtime hours relative to the marginal cost of employing more workers, so firms are encouraged to substitute employment for overtime hours. However, I propose an alternative analysis in which the statutory overtime premium has no real effects because firms reduce the straight-time hourly wage rate so as to offer the same package of total weekly compensation and hours of work that would be acceptable to the worker in the absence of overtime pay regulation.

#### Tse, Wai Man

TI Real Growth Cycle with Adaptive Expectations. AU Lin, Tzong Yau; Tse, Wai Man; Day, Richard H.

#### Tsiddon, Daniel

TI Long-Run Non-Neutrality of Money: A Dynamic General Equilibrium Analysis. AU Galor, Oded; Tsiddon, Daniel.

#### Turnbull, Stuart

TI Pricing Foreign Currency Options with Stochastic Volatility. AU Melino, Angelo; Turnbull, Stuart.

#### Udell, Gregory

TI Collateral, Loan Quality, and Bank Risk. AU Berger, Allen N.; Udell, Gregory.

#### Van Huyck, John B.

TI Nominally Denominated Sovereign Debt, Risk Shifting, and Reputation. AU Grossman, Herschel I; Van Huyck, John B.

#### Van Order, Robert

TI Integration of Mortgage and Capital Markets and the Accumulation of Residential Capital. AU Hendershott, Patric H.; Van Order, Robert.

#### Venti, Steven F.

PD February 1989. TI But They Don't Want to Reduce Housing Equity. AU Venti, Steven F.; Wise, David A. AA Venti: Dartmouth College. Wise: Harvard University. SR National Bureau of Economic Research Working Paper: 2859; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 23. PR \$2.00. JE 932, 918, 921, 315. KW Elderly. Housing. Home Equity. Transaction Costs. Mortgages. Annuity. AB The majority of the wealth of most elderly is in the form of housing equity. It is often claimed that many elderly would transfer wealth from housing to finance current consumption expenditure, were it not for the large transaction costs

associated with changes in housing equity. This is the rationale for a market in reverse annuity mortgages. This paper considers whether transaction costs, understood to include the psychic costs associated with leaving friends, family surroundings, and the like, prevent the elderly from making choices that would improve their financial circumstances.

#### Vincent, Daniel R.

PD July 1989. TI Bidding Off the Wall: Why Reserve Prices are Kept Secret. AA Northwestern University. SR Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 838; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. PG 13. PR no charge. JE 022. KW Auctions. Common Values. Nash Equilibrium.

AB This note shows by means of an example that in a common value auction a seller with a random reservation value can increase her ex ante expected profits by following a policy of conducting an auction in which her reserve price is kept secret compared to one in which the reserve price is announced. By keeping the reserve price secret, the seller is able to encourage greater participation from the bidders and can, therefore, increase the linkage of the price paid to the value of the purchased object.

#### Vohra, Rajiv

PD April 1989. TI An Existence Theorem for a Bargaining Set. AA Brown University. SR Brown University Department of Economics Working Paper: 89-13; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 14. PR No charge. JE 026, 213. KW Utility Game. Game Theory.

AB This paper considers non-transferable utility games and provides sufficient conditions for the existence of the bargaining set introduced in Mas-Colell (1986). Our main assumption is weak balancedness. This assumption is weaker than balancedness and is satisfied in all transferable utility games and all three-player games. The proof of our main result is based on an application of a coincidence theorem of Fan (1969).

#### Wadhvani, Sushil

TI Insider Forces and Wage Determination. AU Nickell, Stephen J.; Wadhvani, Sushil.

#### Waldman, Michael

PD April 1989. TI Up-or-Out Contracts: A Signalling Perspective. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 556; Department of Economics - UCLA, Los Angeles, CA 90024. PG 32. PR \$2.50. JE 824, 825, 821, 022. KW Contracts. Signalling. Human Capital. Productivity.

AB A firm typically will gather information concerning its own workers which is more accurate than information gathered by other potential employers. In turn, other potential employers will attempt to reduce this information asymmetry by observing the actions of the initial employer. The present paper argues that such a process can be important in environments characterized by Up-or-Out contracts. The paper investigates the implications of this argument in two environments: (i) a setting where Up-or-Out contracts are

employed because they provide the worker with an incentive to accumulate general human capital; and (ii) a setting where Up-or-Out contracts emerge because they are preferred by those more likely to be of high productivity.

**TI** The New Perspective on Keynesism Coordination Failure: Theory and Evidence. AU Oh, Seonghwan; Waldman, Michael.

**TI** Keynesian Coordination Failure and Persistence. AU Oh, Seonghwan; Waldman, Michael.

#### **Waldmann, Robert**

**TI** The Size and Incidence of the Losses from Noise Trading. AU De Long, J. Bradford; Shleifer, Andrei; Summers, Lawrence; Waldmann, Robert.

#### **Wang, Eric**

**TI** Market Structure Implications of Instability in the World Coffee Market. AU Sengupta, Jati K.; Wang, Eric.

#### **Ware, Roger**

**TI** Eliminating Price Supports: A Political Economy Perspective. AU Lewis, Tracy R.; Ware, Roger; Feenstra, Robert C.

#### **Warshawsky, Mark J.**

**PD** June 1989. **TI** Postretirement Health Benefit Plans: Costs and Liabilities for Private Employers. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 76; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. PG 30. PR no charge. JE 913, 541, 223, 521. KW Health Benefits. Retirement Benefits. Accounting. Business Finance.

**AB** It is expected that proposed changes in accounting standards for postretirement health benefit plans sponsored by corporate employers would have a significant negative impact on reported profits and on the reported net worth of corporations. Under the proposed standards, accrual accounting would be applied to postretirement health plans, instead of the current method of only accounting for cash disbursements. In particular, an accrued liability based on the level of benefits expected to be paid after retirement, including consideration for health care cost inflation, would be reported.

#### **Watson, Mark**

**TI** Stochastic Trends and Economic Fluctuations. AU Plosser, Charles; King, Robert G.; Stock, James; Watson, Mark.

#### **Weber, Robert J.**

**TI** A Theory of Voting Equilibria. AU Myerson, Roger B.; Weber, Robert J.

#### **Weil, Philippe**

**PD** January 1989. **TI** On the Possibility of Price Decreasing Bubbles. AA Harvard University. SR National Bureau of Economic Research Working Paper: 2821; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 10. PR \$2.00. JE 313, 311. KW Stock Prices. Rational

Bubbles. Asset Prices. Stock Market.

**AB** It is often argued that a rational bubble, because it is positive, must increase the price of a stock. This argument is not valid in general: as soon as bubbles affect interest rates, the fundamental value of a stock depends on whether or not a bubble is present. The existence of a rational bubble then might, by raising equilibrium interest rates, depress the fundamental to such an extent that the sum of the positive bubble and decreased fundamental falls short of the fundamental, no-bubble price. Under conditions made precise below, there can therefore be price decreasing bubbles, and an asset can be "undervalued".

**PD** January 1989. **TI** Money, Time Preference and External Balance. AA Harvard University. SR National Bureau of Economic Research Working Paper: 2822; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 10. PR \$2.00. JE 431, 411, 023. KW Current Account. Time Preference. Trade Balance. Monetary Economy.

**AB** In monetary economies, international differences in rates of time preference do not in general lead to long run trade imbalances -- in sharp contrast with Buiter's [1981] results on non-monetary overlapping generation economies. This claim is documented within the context of a simple two-country framework in which new immortal families enter each economy over time, with the two countries differing only in their subjective discount rates. Even if consumers are more "impatient" at home than abroad, trade is balanced in the long run in the presence of valued fiat currencies in constant supply, and the current account is indeterminate.

**TI** Risk Aversion and Intertemporal Substitution in the Capital Asset Pricing Model. AU Giovannini, Alberto; Weil, Philippe.

**PD** January 1989. **TI** The Equity Premium Puzzle and the Riskfree Rate Puzzle. AA Harvard University. SR National Bureau of Economic Research Working Paper: 2829; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 15. PR \$2.00. JE 313, 311, 021. KW Asset Pricing. Stock Market. Risk Premium. Financial Market.

**AB** This paper studies the implications for general equilibrium asset pricing of a recently introduced class of Kreps-Porteus non-expected utility preferences, which is characterized by a constant intertemporal elasticity of substitution and a constant, but unrelated, coefficient of relative risk aversion. It is shown that the solution to the "equity premium puzzle" documented by Mehra and Prescott [1985] cannot be found, for plausibly calibrated parameter values, by simply separating risk aversion from intertemporal substitution. Rather, relaxing the parametric restriction on tastes and adopting Kreps-Porteus preferences is likely to add a "risk free rate puzzle" to Mehra's and Prescott's "equity premium puzzle".

#### **Weisbach, Michael S.**

**TI** The Economic Effects of Franchise Termination Laws. AU Brickley, James A.; Dark, Frederick H.; Weisbach, Michael S.

**TI** Capital Formation through Franchising. AU Brickley, James A.; Dark, Frederick H.; Weisbach, Michael S.

**Weller, Paul**

**TI** Exchange Rate Bands and Realignment in a Stationary Stochastic Setting. **AU** Miller, Marcus; Weller, Paul.

**TI** Solving Stochastic Saddlepoint Systems: A Qualitative Treatment with Economic Applications. **AU** Miller, Marcus; Weller, Paul.

**Wernerfelt, Birger**

**PD** June 1988. **TI** Market Frictions and Posted Prices. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 778; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 16. **PR** no charge. **JE** 022, 611, 213. **KW** Price Adjustment. Bertrand Model. Trading.

**AB** A lot of recent literature has discussed the possibility of obtaining the Walrasian outcome with decentralized trading. More precisely, I look at a dynamic Bertrand model, where market frictions consist of slow or incomplete adjustments to change in relative prices. I describe equilibria of such markets and show that outcomes converge towards the Walrasian equilibrium as adjustment speeds go up and as adjustment becomes more complete.

**PD** June 1988. **TI** On Existence of a Nash Equilibrium Point in N-Person Nonzero Sum Stochastic Jump Differential Games. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 779; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 14. **PR** no charge. **JE** 026, 213. **KW** Nash Equilibrium. Jump Processes. Differential Games. Feedback Strategy.

**AB** Using the technique of Wan and Davis, we give an existence theorem for a Nash equilibrium point in N-person nonzero sum stochastic jump differential games. It is shown that if the Nash condition (generalized Isaacs condition) holds there is a Nash equilibrium point in feedback strategies. We extend the results to other solution concepts and discuss applications and extensions.

**West, Kenneth D.**

**PD** June 1989. **TI** The Sources of Fluctuations in Aggregate Inventories and GNP. **AA** University of Wisconsin. **SR** National Bureau of Economic Research Working Paper: 2992; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** \$2.00. **JE** 521, 522, 514, 131, 133. **KW** Inventories. Fluctuations. Cost Functions. Demand Shocks.

**AB** A simple real linear-quadratic inventory model is used to determine how cost and demand shocks interacted to cause fluctuations in aggregate GNP and inventories in the U.S., 1947-1986. Cost shocks appear to be the predominant source of fluctuations in inventories, and are largely responsible for the well known fact that GNP is more variable than final sales. Cost and demand shocks are of roughly equal importance for GNP. These estimates are, however, imprecise. With a different, but plausible, value for a certain target inventory-sales ratio, cost shocks are less important than demand shocks for GNP fluctuations.

**White, Halbert**

**PD** June 1989. **TI** Multilayer Feedforward Networks Can

Learn Arbitrary Mappings: Connectionist Nonparametric Regression with Automatic and Semi-Automatic Determination of Network Complexity. **AA** University of California, San Diego. **SR** University of California at San Diego Department of Economics Discussion Paper: 89-11; Department of Economics, D-008, UCSD, La Jolla, CA 92093. **PG** 34. **PR** no charge. **JE** 212, 211. **KW** Nonparametric Regression. Neural Networks. Network Learning. Sieve Estimation.

**AB** It has been recently shown (Hornik, Stinchcombe and White [1988]) that sufficiently complex multilayer feedforward are capable of representing arbitrarily accurate approximations to arbitrary mappings. We show here that these approximations are learnable by proving the consistency of a class of connectionist nonparametric regression estimator for arbitrary (continuous) regression functions. The consistency property ensures that as network "experience" accumulates (as indexed by the size of the training set), the probability of network approximation error exceeding any specified level tends to zero. Of paramount importance to the demonstration of consistency is the proper control of the growth of network complexity as a function of network experience. We give specific growth rates for network complexity compatible with consistency. We also consider automatic and semi-automatic data-driven methods for determining network complexity in applications, based on minimization of a cross-validated average squared error measure of network performance.

**Wiggins, Steven N.**

**TI** Plant Closings, Advance Notice, and Private Contractual Failure. **AU** Deere, Donald R.; Wiggins, Steven N.

**Wildasin, David E.**

**PD** April 1989. **TI** Non-Neutrality of Debt with Endogenous Fertility. **AA** Indiana University. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-241; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 16. **PR** no charge. **JE** 322, 921, 511. **KW** Government Borrowing. Government Debt. Investment. Consumption.

**AB** This paper examines the impact of government borrowing on the real equilibrium of an economy with intergenerational or dynastic utility maximizers and endogenous fertility. In general, incremental government borrowing reduces fertility. In addition, borrowing may increase per head consumption and lower the aggregate capital stock. At the same time, it may raise the capital/labor ratio and the wage/rental ratio, lower utility per head for the current generation, and raise utility per head for future generations. Identical results are obtained for unfunded social security programs.

**Williamson, Stephen D.**

**PD** April 1989. **TI** Restrictions on Financial Intermediaries and Implications for Aggregate Fluctuations: Canada and the United States, 1870-1913. **AA** Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 119; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave., Minneapolis, MN 55480. **PG** 55. **PR** no charge. **JE** 042, 312, 133, 132. **KW** Financial Intermediaries. Banking. Business Cycles.

**AB** During the period 1870-1913, Canada had a well-diversified branch banking system while banks in the U.S. unit banking system were less diversified. Canadian banks could issue large-denomination notes with no restrictions on their backing, while all U.S. currency was essentially an obligation of the U.S. government. Also, experience in the two countries with regard to bank failures and banking panics was quite different. A general equilibrium business cycle model with endogenous financial intermediation is constructed that captures these historical Canadian and American monetary and banking arrangements as special cases.

**Wilson, John F.**

**TI** A Reconciliation of Flow of Funds and Commerce Department Statistics on U.S. International Transactions and Foreign Investment Position. **AU** Hooker, Sarah A.; Wilson, John F.

**Wirjanto, Tony**

**TI** National Savings and Domestic Investment in the Long Run: Some Time Series Evidence for the U.S. and Canada. **AU** Otto, Glenn; Wirjanto, Tony.

**Wise, David A.**

**TI** But They Don't Want to Reduce Housing Equity. **AU** Venti, Steven F.; Wise, David A.

**Wolak, Frank A.**

**TI** Strategic Use of Antidumping Law to Enforce Tacit International Collusion. **AU** Staiger, Robert W.; Wolak, Frank A.

**Wolfe, Barbara**

**TI** Disability Status as a Unobservable: Estimates from a Structural Model. **AU** Haveman, Robert; Huang, Fung Mey; Wolfe, Barbara.

**Wolfson, Martin H.**

**PD** June 1989. **TI** The Causes of Financial Instability. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 78; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, D.C. 20551. **PG** 40. **PR** No charge. **JE** 312, 314, 311. **KW** Banking. Bank Failures. Regulation. Financial Intermediaries.

**AB** This paper investigates the causes of financial instability as measured by episodes of financial crisis and increasing failures of depository intermediaries--in the U.S. economy in the post-World War II period. Increasing instability in the past twenty years is attributed to both cyclical and longer term structural and institutional forces. An econometric model tests the hypothesis that financial instability is related to financial fragility in the business and banking sectors, bank credit availability, and changes in regulatory structure.

**Wrase, Jeffrey**

**TI** Speculative Runs, Fundamental Runs, and Deposit Contracts. **AU** Oh, Seonghwan; Wrase, Jeffrey.

**Wright, Brian**

**TI** Technology Transfer Under Asymmetric Information.

**AU** Gallini, Nancy; Wright, Brian.

**Wyplosz, Charles**

**TI** The European Monetary Union: An Agnostic Evaluation. **AU** Cohen, Daniel; Wyplosz, Charles.

**Zame, William R.**

**TI** Non-Atomic Economies and the Boundaries of Perfect Competition. **AU** Ostroy, Joseph M.; Zame, William R.

**Zang, Israel**

**TI** The Limits of Monopolization through Acquisition. **AU** Kamien, Morton I.; Zang, Israel.

**Zarkin, Gary A.**

**TI** Choice among Wage-Hours Packages: An Empirical Investigation of Labor Supply. **AU** Biddle, Jeff E.; Zarkin, Gary A.

**Zarnowitz, Victor**

**PD** February 1989. **TI** Facts and Factors in the Recent Evolution of Business Cycles in the United States. **AA** University of Chicago. **SR** National Bureau of Economic Research Working Paper: 2865; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 72. **PR** \$2.00. **JE** 133, 131, 023. **KW** Business Cycle. Economic Fluctuations. Macroeconomic Policy. Fiscal Policy.

**AB** A reexamination of data indicates a great diversity of cyclical experience in both the distant and recent history, but also a distinct moderation of the business cycle in the postwar era (shorter and milder contractions). This is consistent with long and widely held views, but contrary to some recent claims. A list of possible sources of the moderation is presented, and several hypotheses are examined.

**Zemel, Eitan**

**TI** Nash and Correlated Equilibria: Some Complexity Considerations. **AU** Gilboa, Itzhak; Zemel, Eitan.

**TI** On the Order of Eliminating Dominated Strategies. **AU** Kalai, E.; Zemel, Eitan.

**Zycher, Benjamin**

**PD** June 1988. **TI** Military Dimensions of Communist Systems. **AU** Zycher, Benjamin; Daley, Tad. **AA** Rand Corporation. **SR** Rand Report: R-3593; The Rand Corporation, 1700 Main Street, PO Box 2138, Santa Monica, CA 90406-2138. **PG** 99. **PR** no charge. **JE** 114, 053, 621. **KW** Military. Defense. Communism. Capitalism.

**AB** This study examines the relative tendencies of Communist and nonCommunist nations to develop or overdevelop their military dimensions, compared with other nations and with the development of their own civil sectors. The four military dimensions are spending burden, manpower proportion, sophistication or overall levels of military and civil technology, and civil-military relations. The analysis is based on a sample of 26 Communist nations and 63 nonCommunist nations, and covers the period 1966-1983. The authors conclude that Communist systems display greater development of military dimensions than do nonCommunist systems, and greater development of military dimensions than their own nonmilitary ones.