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)

Aardal, Karen

PD June 1993. **TI** Capacitated Facility Location: Valid Inequalities and Facets. **AU** Aardal, Karen; Pochet, Yves; Wolsey, Laurence A. **AA** Aardal: Erasmus University. Pochet and Wolsey: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9323; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 31. **PR** not available. **JE** C60, C61. **KW** Facility Location. Capacity.
AB We examine the polyhedral structure of the convex hull of feasible solutions of the capacitated facility location problem. In particular we derive necessary and sufficient conditions for a family of "effective capacity" inequalities to be facet-defining, and further results on a more general family called "submodular" inequalities.

Abraham, Katharine G.

TI Labor Adjustment Under Different Institutional Structures: A Case Study of Germany and the United States. **AU** Houseman, Susan N.; Abraham, Katharine G.

PD November 1993. **TI** Earnings Inequality in Germany. **AU** Abraham, Katharine G.; Houseman, Susan N. **AA** Abraham: University of Maryland and National Bureau of Economic Research. Houseman: W.E. Upjohn Institute for Employment Research. **SR** National Bureau of Economic Research Working Paper: 4541; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** J30, J31. **KW** Earning Differentials. Germany.
AB Recent studies have documented the growth of earnings inequality in the United States during the 1980's. In contrast to these studies' findings, our analysis of micro data for the former West Germany yields virtually no evidence of growth in earnings inequality over the same period. Between 1978 and 1988, a reduction in the dispersion of earnings among workers in the bottom half of the earnings distribution led to a narrowing of the overall dispersion of earnings in Germany. Earnings differentials across education and age groups remained roughly stable, and there was no general widening of earnings differentials within either education or age groups. Germany wage setting institutions tend to limit earnings differentials across groups of workers, but differences in wage setting institutions cannot fully explain the differences between trends in earnings inequality in Germany and those in the United States. Both the high quality of the training received by non-college-bound German youth and the fact that the growth of the highly-educated work force did not decelerate in Germany as it did in the United States seem likely to have contributed to these differences.

Addison, John T.

PD August 1993. **TI** The Worker Adjustment and Retraining Notification Act: Effects on Notice Provision. **AU** Addison, John T.; Blackburn, McKinley. **AA** Addison: University of Southampton and University of South Carolina. Blackburn: University of South Carolina. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9311; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 14. **PR** no charge. **JE** J65, J68. **KW** Plant Closings. Layoffs. Advance Notice.
AB The Worker Adjustment and Retraining Notification Act (WARN) requires that covered firms provide affected employees with 60 days' advance notice of plant closings and large-scale layoffs. We use data from the three most recent Displayed Worker Surveys to compare the extent of notice under voluntary (1983-88) and mandatory (1989-91) notice regimes. We find that the legislation has had at most a small impact on the provision of notice of the length stipulated under the Act. This non-event is likely explained by the liberal firm-size and layoff thresholds for determining coverage under WARN.

TI Voluntary Notice. **AU** Chilton, John B.; Addison, John T.

Adenate, Anat R.

PD October 1992. **TI** Large Shareholder Activism, Risk Sharing, and Financial Market Equilibrium. **AU** Adenate, Anat R.; Phleiderer, Paul; Zechner, Josef. **AA** Adenate and Pfleiderer: Stanford University. Zechner: University of British Columbia. **SR** Stanford Graduate School of Business Research Paper: 1220; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 44. **PR** no charge. **JE** G10, G20, G30. **KW** Shareholder Activism. Institutional Investors. Monitoring.
AB This paper examines financial market equilibrium in the presence of a large investor, such as a pension fund, who has access to a costly monitoring technology allowing him to affect securities' expected payoffs. Despite the free-rider problem that arises because small shareholders enjoy the benefits but do not incur the costs of monitoring, risk-sharing considerations lead to equilibria in which monitoring is done even when the large investor is not initially endowed with shares. We characterize the equilibrium allocations and the monitoring levels under various assumptions about the trading environments. We show that under certain conditions all investors hold the market portfolio of risky assets even when monitoring is possible. In

other cases the large investor deviates from holding the market portfolio and might actually engage in monitoring activities that reduce the expected payoffs on the market portfolio.

Agenor, Pierre-Richard

PD October 1993. **TI** Efficiency Wages and Labor Mobility in an Open Economy. **AU** Agenor, Pierre-Richard; Santaella, Julio A. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 93/79; International Monetary Fund, Washington, DC 20431. **PG** 21. **PR** not available. **JE** E24, J23, J42. **KW** Wage Rigidity. Labor Markets. Labor Mobility.
AB The paper analyzes the role of labor market segmentation and relative wage rigidity in the transmission process of macroeconomic shocks in a two-sector optimizing model of a small open economy. The analysis is first conducted in the context of perfect intersectoral labor mobility. The discussion is then extended to consider the existence of short-run constraints on labor movements. The results highlight the role of efficiency considerations in the behavior of sectoral wages. A deflationary policy induces a reallocation of labor across sectors, but has no long-run effect on the unemployment rate.

PD November 1993. **TI** Price Controls and Electoral Cycles. **AU** Agenor, Pierre-Richard; Asilis, Carlos M. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 93/89; International Monetary Fund, Washington, DC 20431. **PG** 16. **PR** not available. **JE** C72, D72, E64. **KW** Electoral Cycles. Price Controls. Policymakers.
AB This paper studies the interactions between electoral considerations and the imposition of price controls by opportunistic policymakers. The analysis shows that a policy cycle emerges in which price controls are imposed in periods leading to the election, and removed immediately afterwards. The shape of the cycle is shown to depend on the periodicity of elections, the relative weight attached by the public to inflation as opposed to the macroeconomic distortions associated with price controls, the nature of wage contracts, and the degree of uncertainty about the term in office.

Ahmed, Shaghil

PD April 1994. **TI** The Marginal Cost of Funds with Nonseparable Public Spending. **AU** Ahmed, Shaghil; Croushore, Dean. **AA** Ahmed: Pennsylvania State University. Croushore: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 94-5; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 13. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** H40, H50, H30, D61. **KW** Non-Separability.
AB This paper provides new calculations of the welfare effects of fiscal changes when the publicly provided good is nonseparable in utility and production, so that it affects economic agents' marginal decisions. Our results show that these nonseparabilities significantly alter the marginal cost of funds (MCF) that previous studies have calculated. We also report estimates of the nonseparable marginal benefits (NSMB) associated with aggregate government purchases. The net marginal cost of funds, NMCF = MCF - NSMB, is in general positive. Thus, the nonseparable benefits by themselves are not sufficient for a marginal increase in aggregate government purchases of goods and services to be worthwhile.

Alexander, Cindy R.

PD December 1993. **TI** Vertical Contracts as Strategic Commitments. **AU** Alexander, Cindy R.; Reiffen, David. **AA** Alexander: U.S. Department of Justice. Reiffen: Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 204; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 33. **PR** no charge. **JE** L42, K12. **KW** Strategic Commitment. Vertical Restraint. Enforceability.
AB Recent literature has shown that when retailers cannot observe contracts between a manufacturer and their rivals, the manufacturer will be unable to obtain the vertically integrated profit using two-part tariff contracts alone. It has been suggested that vertical restraints, such as RPM and exclusive territories, are observable and thus permit the manufacturer to obtain profits closer to the vertically integrated level. Observability, however, is not sufficient. To serve as a strategic commitment mechanism, a vertical contract must be enforceable as well. We show that the vertical contracts that have been the focus of the recent literature are not self-enforcing but must be externally enforced. We find that in practice the enforceability condition has not been met. This suggests that models which rest on the premise that vertical restraints are strategic commitments do not provide general explanations.

Altman, Edward I.

PD December 1993. **TI** Corporate Distress Diagnosis: Comparisons Using Linear Discriminant Analysis and Neural Networks (The Italian Experience). **AU** Altman, Edward I.; Marco, Giancarlo; Varetto, Franco. **AA** Altman: New York University and Centrale dei Bilanci. Marco and Varetto: Centrale dei Bilanci. **SR** New York University Salomon Brothers Working Paper: S-93-59; 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** 34. **PR** not available. **JE** C52, C25. **KW** Distress Classification. Logit Model.
AB This study compares traditional statistical methodologies for distress classification and prediction, i.e., linear discriminant (LDA) or logit analyses, with an artificial intelligence algorithm known as neural networks (NN). We analyze well over 1,000 healthy, vulnerable and unsound industrial Italian firms from 1982-1992. The results are part of a large effort involving separate models for industrial, retailing/trading and construction firms. The results indicate a balanced degree of accuracy and other beneficial characteristics between LDA and NN. We are particularly careful to point out the problems of the "black-box" NN systems, including illogical weightings of the indicators and overfitting in the training stage both of which negatively impacts predictive accuracy. Both types of diagnostic techniques displayed acceptable classification and holdout sample accuracy and the study concludes that there certainly should be further studies and tests using the two techniques and suggests a combined approach for predictive reinforcement.

Altshuler, Allan

PD October 1993. **TI** The Governance of Urban Land: Critical Issues and Research Priorities. **AA** Harvard

University. **SR** Harvard John F. Kennedy School of Government Discussion Paper: R94-5; John F. Kennedy School of Government, 79 John F. Kennedy Street, Cambridge, MA 02138. **PG** 29. **PR** no charge. **JE** R52. **KW** Land Use. Land Use Regulation.

AB The aim of this paper is to profile the main contours of contemporary debate about U.S. urban land use governance. Part I highlights four critiques of the land use governance system, the mismatch critique, the incoherence critique, the gridlock critique, and the policy perversity critique. Part II analyzes five themes of reform, and conflict among them. These focus respectively on moving land use responsibilities from the local level to regional or statewide entities; on improving consistency among state and local land use policies via stage growth management; on ensuring that new private developments are accompanied in timely fashion by the public infrastructure required to serve them; on enhancing governmental decisiveness without compromising democratic and libertarian values; and on overcoming the policy perversity critique, particularly with respect to racial segregation.

Ammer, John

PD April 1994. **TI** Inflation, Inflation Risk, and Stock Returns. **AA** Board of Governor of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 464; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 41. **PR** no charge. **JE** E31, G12, G14. **KW** Inflation Risk. Stock Market. Asset Pricing.

AB This paper investigates the empirical relation between inflation and stock returns in ten industrialized countries, with a focus on the implications for links between inflation and the macroeconomy. The stock return decomposition of Campbell and Shiller (1988) is used to determine the extent to which the negative contemporaneous stock return associated with a positive inflation surprise is due to (a) lower future real dividends and (b) higher future required real equity returns. The empirical results suggest that generally higher inflation is associated with both lower real dividends and lower required real equity returns in the future. The evidences favors corporate tax-related theories (e.g. Feldstein (1980)) -- in which distortions in the tax system cause an increase in inflation to raise the firm's effective cost of capital relative to the return earned by investors in the firm -- relative to the "risk premium story" that has been credited to Tobin (1958). However, for the United States and the United Kingdom, estimates of the arbitrage pricing theory (APT) model with a conditionally heteroskedastic inflation risk factor suggest that inflation may have increased the average real cost of equity capital by as much as fifty basis points.

Andersen, Torben G.

PD March 1994. **TI** GMM Estimation of a Stochastic Volatility Model: A Monte Carlo Study. **AU** Andersen, Torben G.; Sorensen, Bent E. **AA** Andersen: Northwestern University. Sorensen: Brown University. **SR** Brown University Department of Economics Working Paper: 94-6; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 30. **PR** no charge. **JE** C15, C13, C22. **KW** Method of Moments. Overidentifying Restrictions. Weighting Matrix.

AB This paper examines the properties of alternative GMM procedures for estimation of the log-normal stochastic autoregressive volatility model through a large scale Monte Carlo study. It is demonstrated that there is a fundamental trade-off between the number of moments, or information, included in estimation and the quality, or precision, of the objective function used for estimation. We provide a fairly transparent characterization of the trade-off in the present model. Furthermore, a large sample approximation of the optimal weighting matrix is utilized to explore the impact of the weighting matrix in the estimation procedure and to obtain practical efficiency bounds for the given class of GMM estimators. Moreover, the finite sample properties of the popular chi-square-statistic for goodness-of-fit of the overidentifying restrictions are studied. We find that the best inference is obtained by including a lower number of moments in the GMM procedure than is often used in practical applications.

Andersen, Torben M.

PD October 1993. **TI** Disinflationary Stabilization Policy - Denmark in the 1980's. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1994-7; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 29. **PR** no charge. **JE** E63, F31, E64. **KW** Exchange Rate Policy. Incomes Policy.

AB Denmark shifted in 1982 from a soft to a hard currency option within the EMS, and the paper analyzes the adjustment of this disinflationary stabilization program. The credibility of the program is evaluated by considering the adjustment of nominal interest rates and wages, and the role of a strict incomes policy in making wage increases consistent with the exchange rate policy is stressed. The real adjustment is analyzed, and in particular the expansionary period of the Danish economy 1983-1986 is considered in an attempt to identify the causes of the upturn.

Ando, Albert

PD December 1993. **TI** Prices, Wages, and Employment in the U.S. Economy: A Traditional Model and Tests of Some Alternatives. **AU** Ando, Albert; Brayton, Flint. **AA** Ando: University of Pennsylvania and National Bureau of Economic Research. Brayton: Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Working Paper: 4568; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 41. **PR** $5.00. **JE** E30, E31, E50, E52. **KW** Price Adjustment. Monetary Policy. Money Supply. Lucas Critique.

AB In this paper, we outline the cost minimizing behavior of oligopoly firms and the price adjustment process in the labor market which underlie the traditional formulation of aggregate wage-price behavior in the U.S., and show that resulting equations applied to U.S. data remain stable before and after the significant change in the monetary policy rule that had taken place in 1979. This result contradicts the prediction of the Lucas critique applied to this context that, in response to a major change of the monetary policy rule, the Phillips curve and the price setting equation of firms would have undergone significant changes. We test several competing hypotheses for the price level determination, including the possibility that more direct effect of the money supply should be relevant, and show that our formulation dominates alternatives in non-nested tests. Finally, we present evidence that the nature of capital is

putty-clay rather than fully malleable, together with a demand function for labor based on this recognition. In the process of these inquiries, we contrast our formulation with that proposed by Layard and Nickell in England.

PD December 1993. TI Dissaving by the Elderly, Transfer Motives and Liquidity Constraints. AU Ando, Albert; Terlizzese, Daniele; Guiso, Luigi. AA Ando: University of Pennsylvania and National Bureau of Economic Research. Terlizzese and Guiso: Bank of Italy. SR National Bureau of Economic Research Working Paper: 4569; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 29. PR $5.00. JE E21, J14. KW Wealth Decumulation. Elderly. Precautionary Savings.

AB Two explanations have been proposed for the observed slowness of wealth decumulation by the elderly in the literature: the precautionary saving induced by (uninsurable) uncertainty about the time of death or by the possibility of major catastrophes in old age that require large outlays; the desire to pass part of the accumulated assets on to one's heirs. We reconsider the issue of wealth decumulation by the elderly and assess the presence of a transfer motive, drawing on Italian data. We show that if intergenerational transfer of assets takes place well before the time of death, induced for instance by existence of liquidity constraints on younger families, then tests for the presence of a transfer motive based on the relative speed of decumulation of elderly households with and without a potential bequest motive might have little discriminatory power. We suggest that in this case one should look at the whole pattern of asset accumulation and decumulation. We also offer an alternative test of the bequest motive based on life insurance purchases.

Andrews, Donald W. K.

PD July 1993. TI Admissibility of the Likelihood Ratio Test When a Nuisance Parameter is Present Only Under the Alternative. AU Andrews, Donald W. K.; Ploberger, Werner. AA Andrews: Yale University. Ploberger: Technische Universitat Wien. SR Yale Cowles Foundation Discussion Paper: 1058; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. PG 29. PR no charge. JE C12. KW Lagrange Multiplier. Test. Nuisance Parameter. Nonlinear Models.

AB This paper establishes the asymptotic admissibility of the likelihood ratio (LR) test for a general class of testing problems in which a nuisance parameter is present only under the alternative hypothesis. The paper also establishes the finite sample admissibility of the LR test for testing problems of this sort that arise in Gaussian linear regression models with known variance.

PD September 1993. TI Empirical Process Methods in Econometrics. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1059; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. PG 42. PR no charge. JE C10. KW Stochastic Equicontinuity. Bracketing Condition. Entropy Condition.

AB This paper provides an introduction to the use of empirical process methods in econometrics. These methods can be used to establish the large sample properties of econometric estimators and test statistics. In the first part of the paper, key terminology and results are introduced and discussed heuristically. Applications in the econometrics literature are briefly reviewed. A select set of three classes of applications is discussed in more detail. The second part of the paper shows how one can verify a key property called stochastic equicontinuity. The paper takes several stochastic equicontinuity results from the probability literature, which rely on entropy conditions of one sort or another, and provides primitive sufficient conditions under which the entropy conditions hold. This yields stochastic equicontinuity results that are readily applicable in a variety of contexts. Examples are provided.

PD September 1993. TI Hypothesis Testing with a Restricted Parameter Space. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1060; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. PG 22. PR no charge. JE C12. KW Nonlinear Models. Optimal Test. Admissibility.

AB This paper considers hypothesis tests for nonlinear econometric models when the parameter space is restricted under the alternative hypothesis. Multivariate one-sided tests are a leading example. Asymptotically optimal tests are derived using a weighted average power criterion. In addition, the likelihood ratio test is shown to be asymptotically admissible and to maximize asymptotic power against alternatives that are arbitrarily distant from the null hypothesis. For Gaussian linear regression models with known variance, analogous exact finite sample results are established.

Angrist, Joshua

PD October 1993. TI Split Sample Instrumental Variables. AU Angrist, Joshua; Krueger, Alan B. AA Angrist: Hebrew University and National Bureau of Economic Research. Krueger: Princeton University and National Bureau of Economic Research. SR Princeton Industrial Relations Section Working Paper: 320; Department of Economics, Princeton University, Princeton, NJ 08544-2098. PG 26. PR $1.50. JE C13, J31. KW Instrumental Variables. Returns to Education. Split Sample Estimation.

AB Instrumental Variables (IV) estimates tend to be biased in the same direction as Ordinary Least Squares (OLS) in finite samples if the instruments are weak. To address this problem we propose a new IV estimator which we call Split Sample Instrumental Variables (SSIV). SSIV works as follows: we randomly split the sample in half, and use one half of the sample to estimate parameters of the first-stage equation. We then use these estimated first-stage parameters to construct fitted values and second-stage parameter estimates using data from the other half sample. SSIV is biased toward zero, rather than toward the plim of the OLS estimate. However, an unbiased estimate of the attenuation bias of SSIV can be calculated. We use this estimate of the attenuation bias to derive an estimator that is asymptotically unbiased as the number of instruments tends to infinity, holding the number of observations per instrument fixed. We label this new estimator Unbiased Split Sample Instrumental Variables (USSIV).

Ara, Ismat

PD October 1993. TI Marginal Likelihood Based Tests of Regression Disturbances. AU Ara, Ismat; King, Maxwell L. AA Monash University. SR Monash Department of Econometrics Research Working Paper: 14/93; Department of

Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 26. **PR** no charge. **JE** C12. **KW** Wald Test. Likelihood Ratio Test. Lagrange Multiplier Test.

AB This paper presents general formulae for the likelihood ratio (LR), Wald (W), Lagrange multiplier (LM) and asymptotic locally most mean powerful (ALMMP) tests of linear regression disturbances using marginal likelihood methods. These tests can be derived by treating the maximal invariant statistic for these testing problems as the observed data. By way of illustration, the marginal-likelihood-based LR, W, LM and ALMMP tests are constructed for the separate problems of testing for general AR(4) disturbances and testing for the presence of Hildreth-Houck random coefficients. Empirical size calculations reported here and elsewhere suggest that this approach results in tests whose true sizes are much closer to the nominal size than their conventional counterparts.

Asea, Patrick K.

PD March 1994. **TI** The Balassa-Samuelson Model: A General Equilibrium Appraisal. **AU** Asea, Patrick K.; Mendoza, Enrique G. **AA** Asea: University of California, Los Angeles. Mendoza: International Monetary Fund. **SR** University of California at Los Angeles Department of Economics Working Paper: 709; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 26. **PR** $5.00. **JE** F41. **KW** Economic Growth. Purchasing Parity. Productivity Differentials.

AB We develop a two-country intertemporal general equilibrium model to examine two predictions of the Balassa-Samuelson model, namely that (i) productivity differentials determine the domestic relative price of nontradables and (ii) deviations from the purchasing parity reflect differences in the relative price of nontradables. In this neoclassical model the equilibrium relative price of nontradables along the long-run balanced growth path is determined by the ratio of the marginal products of labor in the tradable and nontradable sectors. We show that this ratio can be expressed as a log-linear function of sectoral capital-output or investment-output ratios. The empirical relevance of these long-run predictions are examined by utilizing the Hodrick-Prescott filter to extract long-run components from a panel database for fourteen OECD countries. The evidence indicates that labor productivity differentials do explain low frequency movements in HP filtered relative prices. The predicted relative prices, however, are only partially successful in explaining long-run deviations from purchasing power partity.

PD March 1994. **TI** The Balassa-Samuelson Model: An Overview. **AU** Asea, Patrick K.; Corden, W. Max. **AA** Asea: University of California, Los Angeles. Corden: Johns Hopkins University. **SR** University of California at Los Angeles Department of Economics Working Paper: 710; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 14. **PR** $5.00. **JE** F41. **KW** Productivity Differentials. Tradables.

AB This paper introduces a special issue marking the thirtieth anniversary of the publication of two classic papers in international economics, Balassa (1964) and Samuelson (1964). We provide a brief analytical treatment of the basic model and an overview of the contributions in this special issue. The papers include novel empirical and theoretical approachs

related to the Balassa-Samuelson model. Theoretical models include dynamic two-sector growth models, two-country general equilibrium models and open-economy models with imperfectly competitive nontraded goods sectors. Several papers exploit new sources of data or datasets constructed in new ways from traditional sources.

Asilis, Carlos M.

TI Price Controls and Electoral Cycles. **AU** Agenor, Pierre-Richard; Asilis, Carlos M.

Atkinson, A. B.

PD July 1993. **TI** Comparing Low Incomes in France and the United Kingdom: Evidence From Household Expenditure Surveys. **AU** Atkinson, A. B.; Gardiner, Karen; Lechene, Valerie; Sutherland, Holly. **AA** Atkinson and Sutherland: University of Cambridge. Gardiner: London School of Economics. Lechene: DELTA, Paris. **SR** University of Cambridge Microsimulation Unit Paper: MPMU 9301; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 51. **PR** $5.00 (L2.50); checks payable to University of Cambridge. **JE** I32, O57, D31. **KW** Poverty. Income Distribution. Income Measurement.

AB The aim of this paper is to make a case study of the comparability of poverty estimates in France and the United Kingdom. The paper begins by examining the basis for the European Commission's figure of 50 million in 1985 with particular reference to these two countries, and to the relation with national studies. It then takes up the question of the comparability of sources. For both countries, use is made of household budget studies, but these differ in several respects. The paper goes on to consider the result which are obtained applying different definitions, demonstrating that different choices can change the conclusions drawn as to the relative extent of poverty in the two countries.

Attfield, C. L. F.

PD March 1994. **TI** Finite Sample Homogeneity Tests in a Cointegrating Demand System. **AA** University of Bristol. **SR** University of Bristol Economics Working Paper: 94/376; Department of Economics, University of Bristol, Alfred Marshall Building, 8 Woodland Road, Bristol BS8 1TN, ENGLAND. **PG** 9. **PR** no charge. **JE** D12, C32. **KW** Almost Ideal Demand. Cointegration. Homogeneity.

AB The set of variables in a demand model in the form of the Almost Ideal Demand System of Deaton and Muellbauer (1980) are found to be I(1) with the demand equations forming a cointegrating system. Finite sample tests for homogeneity with respect to prices and nominal income are applied to the estimates using Phillip's (1994) "triangle error correction model".

Auerbach, Paul

PD December 1993. **TI** Michael Porter's Inquiry Into the Nature and Causes of the Wealth of Nations - The Challenge to Academic Economics. **AU** Auerbach, Paul; Skott, Peter. **AA** Skott: University of Aarhus. Auerbach: Kingston University. **SR** Aarhus Institute of Economics Memo: 1994-10; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 17. **PR** no charge. **JE** O11, O32, L16, O40, L22. **KW** New Growth Theory. Industrial

Structure. Innovation.

AB Neoclassical growth theory in both its old and new forms implicitly assumes that "the market" generates an efficient use of the factors of production, thus leaving little role for the effects of organizational structure and institutions on economic growth. The discussion by Porter of non-market infrastructural linkages contains aspects of a viable critique of neoclassical growth models. But his alternative approach has weaknesses, including a weak historical perspective and a focus on the problems and needs of the richer countries.

TI Cumulative Causation and the "New" Theories of Economic Growth. **AU** Skott, Peter; Auerbach, Paul.

Ausink, John A.

PD December 1993. **TI** The Military Pension, Compensation, and Retirement of U.S. Air Force Pilots. **AU** Ausink, John A.; Wise, David A. **AA** Ausink: United States Armed Forces Academy. Wise: National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4593; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** $5.00. **JE** J33. **KW** Option Value. Military Pension. Departure Behavior.

AB This paper uses the option value model of Stock and Wise to analyze the departure patterns of a sample of pilots in the United States Air Force. Pilot compensation and the military pension are described, as are some details of the option value model and two other models: the Annualized Cost of Leaving (ACOL) model, which is used by the Department of Defense, and a variant of a dynamic programming model proposed by Daula and Moffitt. The option value model captures departure behavior much better than the the ACOL model, and substantially better than the dynamic programming model. The superiority of the option value model to the dynamic programming formulation raises the possibility that individual decision-making may not always be best modeled by a formulation that is intended to capture "correct" economic financial calculations. This is consistent with findings by Lumsdaine, Stock and Wise for civilians in a Fortune 500 firm.

Axtell, R.

TI Foresight as a Survival Characteristic: When (if Ever) Does the Long View Pay? **AU** Ayres, R. U.; Axtell, R.

Ayres, R. U.

PD September 1991. **TI** Foresight as a Survival Characteristic: When (if Ever) Does the Long View Pay? **AU** Ayres, R. U.; Axtell, R. **AA** Ayres: Carnegie-Mellon University and INSEAD. Axtell: Carnegie-Mellon University and Brookings Institution. **SR** INSEAD Working Papers: 93/83/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 19. **PR** not available. **JE** D92, D61. **KW** Time Preference. Discount Rate. Investment.

AB Long range R&D and capital investment projects are normally evaluated by means of a procedure (benefit/cost analysis) that involves a choice of time preference functions. Benefit-cost analysts and many economists typically assume that time preference is a behavioral fact of life, and that the time preference function is essentially equivalent to a compound interest law. In practice, they tend to choose discount rates in the range of 3%-8% p.a. in real terms. Variability in projected benefit/cost ratios resulting from this

uncertainty is commonly dealt with ad hoc, e.g. by simply presenting results for several different discount rates and letting the "decision-maker" select among them. It is argued in this paper that the basic discounting methodology is fundamentally flawed and can lead to significantly inferior social choices, i.e. choices that would be rejected by virtually any rational actor to whom the choice were fairly presented. A more general methodology is needed.

PD August 1993. **TI** Life Cycle Analysis and Materials/Energy Forecasting Models. **AA** INSEAD. **SR** INSEAD Working Papers: 93/80/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 21. **PR** not available. **JE** C67, D57. **KW** Input-Output Model. Process Analysis. Materials Balance.

AB Life Cycle Analysis (LCA) is an increasingly important tool for environmental policy, and even for industry. To choose the "greener" of two products or policies it is necessary to know the indirect as well as the direct contributions to environmental disturbance. A tool that economists would naturally consider using for either of these purposes is the Leontief-type of Input-Output (I-O) model, which was explicitly developed to trace the indirect output requirements associated with final demand. However, I-O models have certain characteristics that limit their applicability for LCA. LCA normally depends heavily on more detailed process analysis. However, process analysis, at least as exemplified by many published LCA's, also suffers from excessive aggregation of "upstream" materials transformation processes, combined with unnecessary disaggregation of "downstream" processes. The paper suggests that systematic use of materials balance conditions at the unit process and industry levels can overcome much of this difficulty. It concludes that a hybrid combination of process analysis and I-O analysis is the most promising approach.

PD November 1993. **TI** Socio-Economic Modelling & Forecasting. **AA** INSEAD. **SR** INSEAD Working Papers: 93/85/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 13. **PR** not available. **JE** C51, C53. **KW** Socio-Economic Models. Trends. Cycles.

AB This is the first of a set of four related papers. It reviews some of the typical variables used in forecasting and modeling exercises, from the standpoint of generalized behavioral characteristics, linkages and time scales. The distinction between secular (irreversible) trends and cyclic (reversible) variables is important. Demographic and economic variables are emphasized particularly herein. Environmental trends are considered in the second paper of the set. Technological trends are discussed in the third paper. The special phenomenology of "crashes" is discussed in depth in the fourth paper in the series.

PD November 1993. **TI** Technological Trends. **AA** INSEAD. **SR** INSEAD Working Papers: 93/87/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 12. **PR** not available. **JE** O33. **KW** Environmental Sustainability. Technology Trends.

AB This is the third of a set of four linked papers under the general heading "FORECASTING AND SCENARIO ANALYSIS". It reviews technological trends likely to be of major importance in the next half century, from the perspective of contributing to ultimate environmental sustainability. It is assumed (for the most part, implicitly) that technologies contributing to environmentally unsustainable practices will

gradually become economically costly and/or socially unacceptable. However, costs are not explicitly considered in this discussion.

Backus, David K.

PD November 1993. **TI** The Japanese Trade Balance: Recent History and Future Prospects. **AA** New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4553; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 16. **PR** $5.00. **JE** F10, F14. **KW** Trade Balance. Terms of Trade. Trade Surplus.
AB I examine the evolution of the Japanese trade balance and its relation to the terms of trade and the value of the yen. Using a vector time series model, I predict that the trade surplus will fall from a high of 3.7 percent of GNP in late 1992 to about 2.6 percent in 1995. This relatively modest decline is an indication that relative prices are not the dominant factor influencing the Japanese trade balance.

Bagwell, Kyle

PD November 1993. **TI** Multilateral Tariff Cooperation During the Formation of Customs Unions. **AU** Bagwell, Kyle; Staiger, Robert W. **AA** Bagwell: Northwestern University. Staiger: The University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4543; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 37. **PR** $5.00. **JE** F10, F13. **KW** Tariffs. Trade Policy. Customs Unions.
AB We study the implications of customs union formation for multilateral tariff cooperation. We model cooperation in multilateral trade policy as self-enforcing, in that it involves balancing the current gains from deviating unilaterally from an agreed-upon trade policy against the future losses from forfeiting the benefits of multilateral cooperation that such a unilateral defection would imply. The early stages of the process of customs union formation are shown to alter this dynamic incentive constraint in a way that leads to a temporary "honeymoon" for liberal multilateral trade policies. We find, however, that the harmony between customs unions and multilateral liberalization is temporary. Eventually as the full impact of the emerging customs unions becomes felt, a less favorable balance between current and future conditions reemerges, and the liberal multilateral policies of the honeymoon phase cannot be sustained. We argue that this is compatible with the evolving implications of the formation of the European Community customs union for the ability to sustain liberal multilateral trade policies under the General Agreement of Tariffs and Trade.

Balakrishnan, Anantaram

PD November 1993. **TI** A Tactical Planning Model for Mixed-Model Electronics Assembly Operations. **AU** Balakrishnan, Anantaram; Vanderbeck, Francois. **AA** Balakrishnan: Massachusetts Institute of Technology. Vanderbeck: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9349; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 40. **PR** not available. **JE** C61, L23, L63. **KW** Column Generation. Tactical Planning. Manufacturing.

AB Utilizing the automatic assembly machines effectively is critical for electronics assembly operations. This paper develops an optimization model and methodology to assign product families to parallel placement machines in a high mix, low volume environment. Unlike strategic and operational models that emphasize either workload balancing or setup optimization, our tactical planning model incorporates both factors by minimizing the total setup cost per demand period while ensuring that none of the placement machines is overloaded. To capture the impact of product assignment decisions on setup cost, we consider a partial setup policy of mounting some components permanently on each machine and loading other components as needed for each product. We formulate the tactical planning problem as an integer program, and show that even the special case of minimizing setup cost on a single machine for a given assignment of products is NP-hard. Our solution method combines column generation, heuristics, and lower bounding procedures.

Ball, Laurence

PD December 1993. **TI** The Dynamics of High Inflation. **AA** Johns Hopkins University and National Bureau of Economic Activity. **SR** National Bureau of Economic Research Working Paper: 4578; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** $5.00. **JE** E31, E62, E64. **KW** Inflation. Fiscal Policy. Incomes Policy. Supply Shocks.
AB This paper presents a model of a high-inflation economy. The model includes the government budget constraint and money demand equation of Cagan's 1956 model; an accelerationist Phillips curve that captures inflation inertia; and an aggregate-spending equation that accounts for the effects of the inflation tax. The paper derives the dynamic effects of fiscal policy, incomes policies, and supply shocks, and uses the results to interpret high-inflation episodes of the 1970's and 1980's.

Barros, Fatima

PD September 1993. **TI** Delegation in a Vertically Differentiated Duopoly. **AU** Barros, Fatima; Grilo, Isabel. **AA** Barros: Universite Catholique de Louvain and Universidade Catolica Portuguesa. Grilo: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9335; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 25. **PR** not available. **JE** D82, L15. **KW** Vertical Differentiation. Agency. Model. Asymmetric Information.
AB In a context of vertical product differentiation we analyze the effect of delegation on quality. We consider a duopoly where firms can delegate to an agent the quality. The quality level is determined by the level of a random fixed cost. The actual realization of this fixed cost is known, at no cost to the firm or to the agent that undertakes the activities associated with this fixed cost. By delegating a firm faces an asymmetry of information since the owner cannot observe the realization of the random variable, while his agent has ex ante full information concerning the actual state of nature. When one firm delegates and the other does not, we find two equilibria that mimic full information situation, and two equilibria which display quality levels for the delegating firm lower than the full information ones. When the delegation decision is endogenous there are equilibria configurations with zero, one and two

delegating firms.

Bartolini, Leonardo
AB This paper studies market expectations of a devaluation of the Irish pound from 1987 to 1993 and relates them to the evolution of Ireland's competitiveness over the same period. Changes in expectations of the currency's devaluation can be explained largely by developments outside Ireland, particularly by past and anticipated movements of sterling. The evolution of Ireland's real exchange rate over the same period is also found to be strongly linked to sterling's fluctuations, even after adjusting for sterling-insensitive trade between Ireland and the United Kingdom, and despite the significant progress toward trade diversification recorded by Ireland during the 1980's. The devaluation of the Irish pound in January 1993 is estimated to exceed investors' realignment expectations at that time as well as the loss of Irish competitiveness since the beginning of the ERM crisis in the summer of 1992. This "excess devaluation" helps explain subsequent large capital inflows and the Irish pound's smooth transition to the wide ERM band in August 1993.

Basu, Susanto
AB Using data on gross output for two-digit manufacturing industries, we find that an increase in the output of one manufacturing sector has little or no significant effect on the productivity of other sectors. Using value-added data, however, we confirm the results of previous studies which find that output spillovers instead appear large. We provide an explanation for these differences, showing why, with imperfect competition, the use of value-added data leads to a spurious finding of large apparent external effects.

Bates, David S.
AB An efficient method is developed for pricing American options on combination stochastic volatility/jump-diffusion processes when jump risk and volatility risk are systematic and nondiversifiable, thereby nesting two major option pricing models. The parameters implicit in PHLX-traded Deutschemark options of the stochastic volatility/jump-diffusion model and various submodels are estimated over 1984-91, and are tested for consistency with the $/DM futures process and the implicit volatility sample path. The parameters implicit in options are found to be inconsistent with the time series properties of implicit volatilities, but qualitatively consistent with log-differenced futures prices. No economically significant implicit expectations of exchange rate jumps were found in full-sample estimation, which is consistent with the reduced leptokurtosis of $/DM weekly exchange rate changes over 1984-91 relative to earlier periods.

Bates, Douglas M.

Bayoumi, Tamim, Hewitt, Daniel
AB This paper investigates the economic impact of a coordinated reduction in military expenditures of 20 percent using a specially modified version of the MULTIMOD world economic model. Simulation results indicate that in developing countries the present value of consumption increases by 46 percent of 1992 GDP, compared to military expenditures cuts, in present value terms, of 33 percent of 1992 GDP. The gains reflect both the release of domestic resources and a positive international economic externality due to enhanced trade and lower world interest rates. Accordingly, the net debtor developing country gains exceed those of industrial countries. Examination of individual developing country economies confirms the significance of the external trade effect on the pattern and level of gains.

Beck, Stacie E.
AB A theory of the liquidity value of money is developed using option pricing techniques. Money is treated as an option on capital gains opportunities on securities caused by interest rate volatility. A formula relates liquidity value to the current interest rate, the long run interest rate and interest rate volatility. Comparative static analysis shows that liquidity value is positively related to interest rate volatility and negatively related to the long run interest rate. The Keynesian idea that investors prefer money when securities are overpriced relative to their long run values is captured in a model consistent with market equilibrium and rational expectations.

Bennett, Neil G.

AU Bennett, Neil G.; Bloom, David E.; Miller, Cynthia K.
AA Bennett: Yale University. Bloom: Columbia University and National Bureau of Economic Research. Miller: Princeton University. SR National Bureau of Economic Research Working Paper: 4564; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR $5.00. JE J12, J13. KW Childbearing. Marriage.
AB We examine the association between nonmarital childbearing and the subsequent likelihood of first marriage and document a negative association between these variables - controlling for a variety of potentially confounding influences - in several large survey data sets for the United States. We then subject possible explanations of this finding to empirical test. The analyses performed support the following conclusions: Nonmarital childbearing does not appear to be driven by low expectations of future marriage. Rather, the direction of causation is just the reverse: Nonmarital childbearing tends to be an unexpected and unwanted event that has multiple effects, which on balance are negative, on a woman's subsequent likelihood of first marriage. Further, the upward trend in the proportion of childbearing that occurs outside of marriage may account for one-fourth of the increase in the proportion of women never marrying in the United States over cohorts separated by almost two decades. We do, however, find that nonmarital childbearers are more likely to enter informal cohabitational unions than are their single counterparts who do not bear a child.

Bensaou, M.

PD not available. TI Interorganizational Relationships and Information Technology: A Conceptual Synthesis and a Research Framework. AU Bensaou, M.; Venkatraman, N. AA Bensaou: INSEAD. Venkatraman: Massachusetts Institute of Technology. SR INSEAD Working Papers: 93/86/TM/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 16. PR not available. JE L14, L22, L41. KW Transaction Costs. Organization Theory. Coordination Strategy.
AB This paper integrates theoretical concepts from transaction cost economics, organization theory and political economy to develop a conceptual framework to guide research on inter-organizational coordination strategies, particularly those that explicitly leverage IT capabilities. We outline research directions and approaches to bridge the requirements of theory building and theory testing.

Berndt, Ernst R.

PD November 1993. TI Econometric Estimates of Prices Indexes for Personal Computers in the 1990's. AU Berndt, Ernst R.; Rappaport, Neal; Griliches, Zvi. AA National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4549; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 29. PR $5.00. JE E30, L63. KW Computers. Price Indices. Hedonic Prices.
AB In this paper we construct a number of quality-adjusted price indexes for personal computers in the U.S. marketplace over the 1989-92 time period. We generalize earlier work by incorporating simultaneously the time, age and vintage effects of computer models into a fully saturated parameterization, and then develop a corresponding specification test procedure. While the simple arithmetic mean of prices of models by year reveals a price decline of about 11% per year, use of a matched model procedure similar to that commonly used by government statistical agencies generates a much larger rate of price decline -- about 20% per year. Since the matched model procedure holds quality constant, it ignores quality change embodied in new models. When data on new and surviving models are used in the estimation of hedonic price equations, a variety of quality-adjusted price indexes can be calculated, with varying interpretations. Although there are some differences, we find that on average these quality-adjusted price indexes decline at about 30% per year, with a particularly large price drop occurring in 1992. Parameters in hedonic price equations for desktop PC models differ from those for mobile PC's. Moreover, quality-adjusted prices fall at a slightly lower AAGR for mobile models (24%) than for desktops (32%). We conclude that taking quality changes into account has an enormous impact on the time pattern of price indexes for PC's.

Bertocchi, Graziella

PD January 1994. TI Bayesian Learning and Overlapping Generations. AU Bertocchi, Graziella; Wang, Yong. AA Bertocchi: Universitadi Modena and Brown University. Wang: Virginia Polytechnic Institute. SR Brown University Department of Economics Working Paper: 94-5; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 19. PR no charge. JE D83, D84, E10. KW Rational Expectations. Imperfect Information.
AB We integrate a Bayesian learning process into a stochastic overlapping-generations model in which agents have imperfect information about the technological parameters. We study the Rational Expectations Equilibrium with Imperfect Information of the dynamic model, which is defined as a sequence of beliefs and values of the capital stock. We show that the stochastic sequence of beliefs converges to a limit, which corresponds to the true value of the technological parameters under a mild sufficient condition. In general, however, even if complete learning is achieved the stochastic sequence of capital stocks is affected by the presence of imperfect information and learning. If the economy under perfect information displays multiple stationary equilibria, then learning can also affect the stationary equilibrium to which the economy converges in the long run.

Besley, Timothy

PD December 1993. TI Does Electoral Accountability Affect Economic Policy Choices? Evidence From Gubernatorial Term Limits. AU Besley, Timothy; Case, Anne. AA Princeton University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4575; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 22. PR $5.00. JE D72, D73, E61. KW Economic Policy. Political Accountability. Incumbency.
AB This paper uses data from U.S. states to investigate whether electoral accountability affects economic policy choices. We set up a model in which the possibility of being re-elected may curtail opportunistic behavior by incumbent governors. We find that facing a binding term limit affects choices on taxes, expenditures, state minimum wages and mandates on workers' compensation. Such effects are found also to vary with the party affiliation of the incumbent. The Democratic party also appears to suffer at the polls following the term of a lame-duck, Democratic incumbent.

Bianchi, Marco

AB The segmented regression approach described in Bianchi (1993a,b) is applied in this paper to pairs of time series, with the aim of establishing empirical relationships and directions of causality between variables. The approach is based on the assumption of regime shifts in univariate time series occurring infrequently over time. Cause-effect relationships are established on the basis of the timing of the regime shifts in the series. Applications to the wage-price, the tax-spending, and the money-price relations in the United States are reported.

AB In Bianchi (1993), we suggested an algorithm for estimating in time series the number and the location of change points, or trend-breaks, caused by infrequent permanent shocks. In this paper, the performance of the algorithm is evaluated upon the series of U.S. nominal wages over the period 1900-1970. The aim of the analysis is to reconsider empirical evidence suggested for this series by unit root models, from the new perspective of infrequent permanent shocks, or segmented trend representations. By comparing the results with those derived so far in the literature, some significant improvements are obtained both from the point of view of the statistical modelization and the economic interpretation of the data.

AB The paper fits into the recent debate about persistence of shocks and unit roots in macroeconomic time series. Taking the large persistence of shocks as an empirical well-established fact, the debate focus now on whether such an empirical finding is more consistent with the hypothesis of infrequent or frequent permanent shocks. A priori, the trend-break (i.e. infrequent) hypothesis is often considered more appealing, but it entails identifying an algorithm which can be use to select break dates from the series. Such an algorithm is suggested in the paper.

Black, Jane

Collateral. Information Asymmetries. Business Survival.
AB Small businesses have high failure rates yet they typically pay low risk premia on their bank loans. The proximate explanation is the high levels of collateral demanded by banks. At first sight this heavy reliance on security is consistent with existing models of credit markets under asymmetric information. This paper begins by observing that such theories do not fully account for the facts. A model is proposed in which trading experience enables entrepreneurs to acquire superior information concerning their future prospects. As a result, they are able to divert trading profits and asset value to their own advantage either if default is inevitable or if it would be more profitable to renege on their debt rather than repaying it. Amongst the implications are that the upper bound on the risk premium is independent of base rates, that proportionally less collateral is required for smaller undertaking, and that the riskier the venture the higher will be both the collateral required and the risk premium charged. All sectors experience under-investment but the shortfall is greatest where intrinsic risk is highest. In contrast to its rivals, the theory developed in the paper implies that ex-post collateral appreciation depresses firm survival rates. This prediction is confirmed by empirical tests using UK cohort data on business survival.

AB Identical cases of wine are often auctioned one immediately after another. Ashenfelter (1989) reports that on average the later lots fetch less. Such a systematic price difference seems anomalous, the more so since it is shown here that rational expectations imply not equal, but rising, prices. Risk aversion is an obvious way of reconciling the evidence with rational behavior. There is an alternative explanation. The auctions observed by Ashenfelter involved a buyer's option whereby the first-round winner could purchase further cases at the same price. It is shown that this feature may both account for the observed price trajectory and raise seller revenue.

AB This paper investigates the extent to which the supply of collateral affects business formation in the UK. Bank loans are typically secured on the entrepreneur's house. Using a variety of data and formulations, evidence is found that a 10% rise in the value of unreleased net housing equity increases the number of new VAT registrations by some 5%. Despite the inclusion of macro variables, rather than representing a collateral effect, the rise in house values might be a proxy for improved business conditions. This interpretation is countered by the finding that increases in housing equity do not affect the survival chances of established firms and that survival is lowered by increases in house prices relative to those at the time the firm started. The

reasoning for this is that a firm in difficulty will exit sooner if it is the proprietors' own assets rather than the bank's which are wasting away. An alternative explanation of the correlation between house prices and VAT registrations is that both series move in response to financial deregulation. This hypothesis is undermined by the fact that the relationship shows up in regional cross-section data. Overall the collateral story seems to make the most sense of the facts. Since we report evidence that businesses formed in response to increases in the value of housing assets seem to be of at least average quality as measured by survival chances, there appears to be a large pool of untapped entrepreneurial talent.

Blackburn, McKinley

TI   The Worker Adjustment and Retraining Notification Act: Effects on Notice Provision.   AU   Addison, John T.; Blackburn, McKinley.

Blaug, Mark

PD   July 1993.   TI   Why I am not a Constructivist, or Confessions of an Unrepentant Popperian.   AA   University of Exeter.   SR   University of Exeter Department of Economics Discussion Paper: 93/07; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND.   PG   41.   PR   no charge.   JE   B40, B41. KW   Economic   Methodology.   Scientific   Methodology. Methodology.
AB   A defense of Popperian falsificationism and Lakatos' methodology of "scientific research programmes" against recent denials of their applicability to economics. The question depends critically on whether and in what sense there has been progress in economics. Much of the paper is devoted to examining this issue of "progress of knowledge" in economics.

PD   July 1993.   TI   Is the Quantity Theory of Money True? AA   University of Exeter.   SR   University of Exeter Department   of   Economics   Discussion   Paper: 93/08; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG   28.   PR   no charge.   JE   E40.   KW   Quantity Theory. Money Supply.
AB   What reasons do we have for believing in the quantity theory of money, one of the oldest and long-lived theories in the whole of economics? Is it that the theory is so theoretically compelling? By no means: it is actually a rather loose, open-ended theoretical argument about the causal influence of the supply of money on the level of prices. Nevertheless, it is supported by an overwhelming body of empirical evidence and in that sense is about as true as any theory of economics is ever likely to be. It is facts and not analytical rigor that makes the quantity theory of money good economics. I venture to assert that this is so with most of not all economic theories.

Blommestein, Hans J.

PD   October 1993.   TI   The Role of Financial Institutions in the Transition to a Market Economy.   AU   Blommestein, Hans   J.;   Spencer,   Michael   G.   AA   Blommestein: International Monetary Fund and OECD. Spencer: International Monetary Fund.   SR   International Monetary Fund Working Paper: 93/75; International Monetary Fund, Washington, DC 20431.   PG   34.   PR   not available.   JE   G20, G30, P20. KW   Financial Institutions. Financial Sector. Transition.
AB   Financial institutions intermediate between savers and investors and contribute to corporate governance. Equity and bond markets in the former centrally planned economies are not yet in a position adequately to provide these services. It is not yet clear that investment funds will provide the necessary financing and corporate management. Therefore the first priority for financial sector reforms must be to establish a healthy commercial banking sector. Banks are the most promising source of financing, provide payment services which are crucial to both the real and financial sectors and, by monitoring the use of loaned funds, will be the primary source of corporate governance during the transformation to a market economy.

Bloom, David E.
TI   The Influence of Nonmarital Childbearing on the Formation of First Marriages.   AU   Bennett, Neil G.; Bloom, David E.; Miller, Cynthia K.

PD   December 1993.   TI   Language, Employment, and Earnings in the United States: Spanish-English Differentials From 1970 to 1990.   AU   Bloom, David E.; Grenier, Gilles. AA   Bloom: Columbia University and National Bureau of Economic   Research.   Grenier: University   of   Ottawa. SR   National Bureau of Economic Research Working Paper: 4584;   National   Bureau   of   Economic   Research,   1050 Massachusetts Avenue, Cambridge, MA 02138.   PG   21. PR $5.00.   JE   J31, J15, Z10.   KW   Wage Differentials. Language. Employment.
AB   This   paper   analyzes   employment   and   earnings differentials between Spanish speakers and English speakers in the United States, using data from the 1970, 1980, and 1990 U.S. censuses. The results show that Spanish speakers, both men and women, do not perform as well in the labor market as English speakers. The results also reveal that Spanish-English earnings and unemployment differentials increased slightly in the 1970s, most likely because of rapid growth in the number of Spanish speakers. By contrast, these differentials increased sharply in the 1980s, also a period of rapidly increasing supply. However, there is no evidence that the widening of differentials in the 1980s reflects an increase in the labor market rewards to English language proficiency. Rather, they appear to be result of Spanish speakers having relatively little of those labor market characteristics, most notably education, whose market value increased dramatically during the 1980s.

Bonanno, Giacomo
PD   April   1994.   TI   Knowledge,   Rationality   and Equilibrium   in   Extensive   Games.   AA   University   of California, Davis and Harvard University.   SR   University of California at Davis Economics Department Working Paper: 94-6;   Department   of   Economics,   University   of   California, Davis,   CA   95616-8578.   PG   38.   PR $3.00   U.S.   and Canada. $4.00 International.   JE   C72, D83.   KW   Common Knowledge. Rationality. Extensive Form Games.
AB   It is argued that a natural model for the study of epistemic matters in the context of extensive games in one where the set of "states" is given by the set of decision nodes. This requires extending the definition of extensive game by adding, for every player, a partition of the set of nodes. A further addition is made, namely the specification of a plan of action for every player at every node. A player is defined to be irrational at a node if she has a better plan at that node and she knows this. The main results are the following: (1) in games with perfect information, rationality of all the players at every node is necessary and sufficient for subgame-perfection; (2) in

games with imperfect information it is possible to have common knowledge of rationality at every node and yet not subgame-perfection; (3) for a fairly general class of games, rationality of all the players at the root is necessary and sufficient for Nash equilibrium; (4) for a fairly general class of games and a natural class of information partitions, rationality of all the players at every node is sufficient for subgame perfection.

Bordo, Michael D.

PD November 1993. TI A Comparison of the United States and Canadian Banking Systems in the Twentieth Century: Stability vs. Efficiency. AU Bordo, Michael D.; Rockoff, Hugh; Redish, Angela. AA Rutgers University and National Bureau of Economic Research. Redish: University of British Columbia. SR National Bureau of Economic Research Working Paper: 4546; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 21. PR $5.00. JE G20, G21, G28. KW Canadian Banking. Banking Systems. Market Power.
AB This paper asks whether the vaunted comparative stability of the Canadian banking system has been purchased at the cost of creating an oligopoly. We assembled a data set that compares bank failures, lending rates, interest paid on deposits and related variables over the period 1920-1980. Our principal findings are that: (1) interest rates paid on deposits were generally higher in Canada;(2) interest income received on securities was generally slightly higher in Canada; (3) interest rates charged on loans were generally quite similar; (4) net rates of return to equity were generally higher in Canada than in the U.S.

TI Rules, Discretion, and Central Bank Independence: The German Experience 1880-1989. AU Eschweiler, Bernhard; Bordo, Michael D.

Borenstein, Severin

TI Dynamic Pricing in Retail Gasoline Markets. AU Shepard, Andrea; Borenstein, Severin.

PD October 1993. TI Dynamic Pricing in Retail Gasoline Markets. AU Borenstein, Severin; Shepard, Andrea. AA Borenstein: University of California, Davis and National Bureau of Economic Research. Shepard: Stanford University and National Bureau of Economic Research. SR University of California at Davis Economics Department Working Paper: 93-21; Department of Economics, University of California at Davis, CA 95616-8578. PG 29. PR $3.00 U.S. and Canada. $4.00 International. JE L13, L16, L62. KW Implicit Collusion. Gasoline. Dynamic Pricing.
AB This paper tests for price patterns in retail gasoline markets consistent with those predicted by models of implicit collusion among firms. Recent supergame models show that the highest supportable collusive price is a function of today's profit relative to expected future profit: collusive prices are higher when predictable changes in demand or cost lead firms to expect that collusive profits are increasing rather than declining. Ceteris paribus, collusive profits will be expected to increase when demand is expected to increase and/or costs are expected to decline. Using panel data on sales volume, and retail and wholesale prices in 59 cities over 72 months, we find results consistent with these predictions. Controlling for current demand and input price, the elasticity of current retail margins with respect to expected next-month demand is about 0.37. The

elasticity of current margins with respect to next-month wholesale price is about -0.37. The results are inconsistent with inventory effects.

Borjas, George J.

PD December 1993. TI Foreign Competition, Market Power, and Wage Inequality: Theory and Evidence. AU Borjas, George J.; Ramey Valerie A. AA University of California, San Diego and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4556; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR $5.00. JE D40, L11, J31, F10. KW Wage Inequality. Foreign Competition. Industry Concentration.
AB In this paper, we present theory and evidence on the link between wage inequality and foreign competition in concentrated industries. We develop a simple model in which the impact of foreign competition on the relative wages of an economy depends on the market structure of the industry penetrated. We show that the more concentrated is the industry, the greater is the impact of trade on general wage inequality. We use the theory to argue why import competition in an industry such as automobiles is much more deleterious to the wages of the less educated than import competition in an industry such as apparel. We then test our hypothesis using a panel data set on relative wages across SMSA's. We reinterpret our model as a model of local economies, and test it using both the cross-sectional and time-series variation across labor markets.

Brainard, S. Lael

PD December 1993. TI An Empirical Assessment of the Proximity-Concentration Tradeoff Between Multinational Sales and Trade. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4580; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 41. PR $5.00. JE F10, F13, L10. KW Transport Costs. Investment Barriers. Scale Economies. Overseas Production.
AB This paper empirically investigates the role of transport costs, trade and investment barriers, production scale economies, and firm-specific advantages in determining the use of overseas production relative to exports. The proximity-concentration hypothesis is robust in explaining the share of total sales accounted for by affiliate sales: this share is greater the higher are transport costs and trade barriers and the lower are plant scale economies and investment barriers. Although strictly speaking, the proximity-concentration hypothesis applies to the shares of affiliate sales and exports rather than the levels, the effects of trade and investment barriers on the levels are similar to their effects on the shares, controlling for simultaneity, and so is that of freight factors in the trade estimates. The elasticity of inward and outward net affiliate sales with respect to tariffs is around 0.45, and that with respect to NTB's is an additional 0.17. The elasticity of both imports and exports with respect to freight factors is -1. However, the effect of freight factors on the level of affiliate sales is not robust, and the probability of observing any affiliate sales is increasing in proximity.

PD December 1993. TI An Empirical Assessment of the Factor Proportions Explanation of Multinational Sales. AA Massachusetts Institute of Technology and National

Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4583; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** $5.00. **JE** F23. **KW** Multinational Firms. Factor Proportions. Exports.
AB This paper provides empirical evidence that challenges the factor proportions explanation of multinational activity. The same tests on intra-industry rations and total volumes that were used to demonstrate that a substantial part of trade is explained by factor proportions and income similarities rather than differences are applied to affiliate sales with surprisingly similar results. Some support for the factor proportions hypothesis is derived by comparing affiliate production destined for export to the parent's market, which is the category of activity most likely to be motivated by factor proportions considerations, with that destined for sale in the local market. Affiliate production destined for export home is moderately more responsive to factor proportions differences. However, the two types of activity differ more in their responses to transport costs and destination market income. Overall, the evidence suggests that only a small part of multinational activity into and out of the U.S. in the late 1980's can be explained by factor proportions differences.

Brayton, Flint
TI Prices, Wages, and Employment in the U.S. Economy: A Traditional Model and Tests of Some Alternatives. **AU** Ando, Albert; Brayton, Flint.

Brennan, Geoffrey
PD August 1993. **TI** Rationalizing Parliamentary Systems. **AU** Brennan, Geoffrey; Hamlin, Alan. **AA** Brennan: Australian National University. Hamlin: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9313; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 24. **PR** no charge. **JE** D72, H11. **KW** Parliament. Political Parties. Electoral Competition.
AB Public choice analysis of democratic political institutions focuses on the issues that are most salient under U.S. constitutional arrangements. Parliamentary systems offer different institutional arrangements and different changes to the Public Choice approach. We outline a Public Choice account of parliamentary democracy which concentrates attention on the roles of electoral competition and disciplined political parties, while also offering a discussion of parliamentary procedure. The Public Choice approach is contrasted with the mainstream view of representative, responsible government in which disciplined political parties are often seen as a threat to parliamentary democracy.

PD August 1993. **TI** A Revisionist View of the Separation of Powers. **AU** Brennan, Geoffrey; Hamlin, Alan. **AA** Brennan: Australian National University. Hamlin: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9314; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 30. **PR** no charge. **JE** D72, H11. **KW** Constitution. Political Institutions.
AB The doctrine of the separation of powers attracts almost universal support as a central element of the liberal constitution designed to protect citizens against governmental power. However, there is little agreement on, or analysis of, the precise institutional requirements of the doctrine or the method by which the claimed benefit is achieved. We set out a simple model of the interaction between citizen-voters, the legislature and the executive to illustrate that the functional division of powers can operate systematically against the interests of citizen-voters. This case provides the basis for both a taxonomy of distinct senses of the separation of powers, and for the revisionist claim that there is a general liberal presumption against the functional separation of powers.

Brenner, Menachem
PD October 1993. **TI** Implied Foreign Exchange Rates Using Option Prices. **AU** Brenner, Menachem; Landskroner, Yoram. **AA** Brenner: New York University. Landskroner: Hebrew University of Jerusalem and New York University. **SR** New York University Salomon Brothers Working Paper: S-93-53; Salomon Brothers Center for the Study of Financial Institutions, Graduate School Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 18. **PR** not available. **JE** F31, G13, G18. **KW** Foreign Exchange Market. Black Market. Currency Options.
AB Many countries around the globe impose restrictions on foreign exchange transactions and maintain an official exchange rate. In these countries we usually find an active black market for foreign exchange. This market, however, does not replace the official market since most financial institutions and business entities involved in international trade can transact in the official market. The existence of restrictions and controls may cause the official rate to diverge from the equilibrium rate. It is difficult to determine whether the black market provides a better estimate of the equilibrium exchange rate. The introduction of derivative instruments on foreign exchange, open to all market participants, may provide us with a clue. The main objective of this paper is to use currency call options prices to make inferences regarding equilibrium exchange rates. A second objective is to examine the relationship between volatility of the exchange rate and expectations of government-induced devaluation of the home currency.

Brenner, Robin J.
PD June 1993. **TI** Arbitrage, Cointegration and Testing for Simple Efficiency in Financial Markets. **AU** Brenner, Robin J.; Kroner, Kenneth F. **AA** University of Arizona. **SR** University of Arizona Economics Working Paper: 93-4; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. **PG** 14. **PR** $2 Canada and U.S.; $3 Overseas by air. **JE** G12, G14, C22. **KW** Currency Markets. Commodity Markets. Unbiasedness Hypothesis.
AB Many researchers have found that spot and forward (future) rates in currency markets are cointegrated with cointegrating vector (1,-1), while they are not cointegrated in commodity markets. In this paper we use a no-arbitrage pricing rule to show that the existence of cointegration depends on the time series properties of the cost-of-carry, and argue that the conditions for cointegration are more likely to hold in currency markets than in commodity markets. We discuss several implications of our model (such as why the forward rate forecast error, the basis and the forward premium are serially correlated), but emphasize the implications on empirical tests of the "simple efficiency hypothesis" in financial markets. This

hypothesis is so prevalent in the finance literature that many tests for it have been developed. We examine four of the common tests and use our cointegration results to demonstrate why each of these tests should reject the null hypothesis of simple efficiency. The results from the existing empirical literature strongly support our hypotheses.

AB The short-term rate of interest is crucial for much of theoretical and empirical finance. Yet no consensus has emerged on either the dynamics of the interest rate level or the dynamics of its volatility. We introduce a new flexible functional form for the dynamics of short-term interest rate volatility which nests several competing interest rate models. Our model uses time-varying parameters to allow interest rate volatility to depend on both rate levels and information shocks to the market. Using Wooldridge's (1990) robust conditional moment tests, we compare our model to other models popular in the literature, and find that it performs better by any reasonable statistical standard. Two important conclusions may be drawn from this paper. First, the importance of interest rate volatility on levels has been exaggerated in the literature. While this relationship is important, adequately modeling the volatility as a function of unexpected "news" is more important. We also conclude that existing theoretical models of interest rates are misspecified with respect to volatility.

Brennscheidt, Gunnar
AB This paper describes a series of laboratory experiments which were focused on the influence of exogenous variables on forecasting behavior. In all experiments, the time series to be forecasted was generated by a linear econometric model involving two or three artificial exogenous variables. This design provides an optimal background for testing rational expectations and least-squares learning. As expected, these hypotheses do not explain observed forecasting behavior satisfactorily. Some phenomena closely related to this lack of rationality are studied: Concentration on changes rather than on levels, underestimation of changes, and upward bias. The rule "previous value plus half of the statistically expected change" provides a good explanation of observed forecasting behavior. Some learning behavior is observed within the first 20 periods. Finally, some determinants of the dispersion of forecasts are studied.

Brezis, Elise S.
AB During time of major technological change leading cities are often overtaken by upstart metropolitan areas. Such upheavals may be explained if the advantage of established urban centers rests on localized learning-by-doing. When a new technology for which this accumulated experience is irrelevant is introduced, older centers prefer to stay with a technology in which they are more efficient. New centers, however, turn to the new technology, and are competitive despite the raw state of that technology because of their lower land rents and wages. Over time, as the new technology matures, the established cities are overtaken.

AB When a country is the recipient of large-scale, politically motivated immigration - as has been the case for Israel in recent years - the initial impact is to reduce real wages. Over the longer term, however, the endogenous response of investment, together with increasing returns, may well actually increase real earnings. If immigration itself is not wholly exogenous, but responds to real wages, there may be multiple equilibria. That is, optimism or pessimism about the success of the economy at absorbing immigrants may constitute a self-fulfilling prophecy.

Brown, Donald J.
AB We present a finite system of polynomial inequalities in unobservable endogenous variables and market data that observations on market prices, individual incomes and aggregate endowments must satisfy to be consistent with equilibrium behavior of some pure exchange economy. We also derive a corresponding family of polynomial inequalities for production economies. For these economies, we give necessary and sufficient conditions in terms of observations on market prices, aggregate endowments, individual profit shares, and individuals' income from their endowments for these observations to be consistent with the equilibrium behavior of some production economy. We use quantifier elimination to derive for both the two-person model of pure exchange and the two-sector general equilibrium model comparative statics relationships between two observations on market data that are necessary and sufficient for the existence of utility functions and production functions which are consistent with equilibrium

behavior in the pure exchange economy and the two-sector model.

Broze, Laurence

AB The recent financial literature has been much concerned with the short-term interest rate. Several models have been proposed and studied quite extensively. Despite the number of models, relatively little is known about their empirical comparison. A first approach of this problem is proposed in Chan, Karolyi, Longstaff and Sanders (1992) using a Generalized Method of Moments. In this paper, we give a general form encompassing the most usual models and derive a well specified discrete time version. Then we study the ergodic properties in order to build a consistent econometric procedure based on a maximum likelihood approach. An empirical comparison is performed using U.S. Treasury Bill data. Finally, we propose an estimation strategy, based on a two-step indirect simulated method, to account for the discretization bias.

Bulkley, George

AB No abstract available.

Bunke, Olaf

AB The results of analyzing experimental data using a parametric model may heavily depend on the chosen model. In this paper we propose procedures for the adequate selection of nonlinear regression models if the intended use of the model is among the following: prediction of future values of the response variable, estimation of the unknown regression function, calibration or estimation of some parameter with a certain meaning in the corresponding field of application. The performance of the selected model is discussed, and several examples illustrate the behavior of the procedures. Programs written in Splus for handling such problems for selecting problems are described as well. Moreover, we propose a procedure for selecting an appropriate nonlinear transformation of the observations which may lead to an improved accuracy.

Cahuzac, E.

AB The object of this paper is to explore how to use administrative data for econometric purposes when these data measure total annual duration spent in various states. A basic issue addressed in this paper is to check whether the information extracted through categorizing continuous data actually defines an economically meaningful concept of an individual position on the labour market. The main findings are first that discretization indeed leads to interpretable transitions on the labour market and second that the mobility between positions is rather low in Belgium.

Calomiris, Charles W.

AB The discount window has been under attack recently as a costly and unnecessary tool of policy. This paper argues that the primary role of the discount window should be to provide occasional, temporary support to particular financial markets during localized financial crises. The benefits of the discount window revolve around information externalities across firms resulting from confusion over the incidence of bad news, or reductions in the net worth of market intermediaries. The history of the Penn Central commercial paper crisis of 1970, and the Fed's use of the discount window to combat that crisis, are reviewed. The crisis is visible in a pronounced decline in outstanding commercial paper, an increase in the interest rate spreads for commercial paper and for long-term debt, and declines in stock prices. Cross-sectional variation in abnormal stock returns indicates that, controlling for other factors, firms that were likely to have had outstanding debt in the form of commercial paper suffered larger negative returns during the onset of the crisis, and larger positive returns after the Fed intervened to lower the cost of commercial paper rollover. Implications of the 1970 crisis for current financial markets, and for discount window policy, are considered in light of this evidence.

Cameron, A. Colin

Utilization. **AU** Cameron, A. Colin; Windmeijer, Frank A. G. **AA** Cameron: University of California, Davis. Windmeijer: Australian National University. **SR** University of California at Davis Economics Department Working Paper: 93-24; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 17. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** C52, C20, I12. **KW** Goodness of Fit. Poisson Regression. Deviance.

AB R-squared measures of goodness of fit for count data are rarely, if ever, reported in empirical studies or by statistical packages. We propose several R-squared measures based on various definitions of residuals, for the basic Poisson regression model and for more general models such as negative binomial that accommodate overdispersed data. Use of these measures is generally more informative than the current practice of not computing an R- squared. The preferred R-squared is based on the deviance residual. An application to data from the 1977-78 Australian health survey reveals that health status variables, especially recent health, are much more important than socioeconomic characteristics and health insurance status in determining the number of doctor consultations in the past two weeks. This application illustrates the performance and usefulness of the various R-squareds.

Campbell, John Y.

PD November 1993. **TI** Understanding Risk and Return. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4554; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** $5.00. **JE** G10, G12. **KW** Asset Pricing. Stock Market Risk. CAPM.

AB This paper uses an intertemporal equilibrium asset pricing model to interpret the cross-sectional pattern of stock and bond returns. The model relates assets' mean returns to their covariances with the contemporaneous return and news about future returns on the market portfolio. In a departure from standard practice, the market portfolio return is measured using data on both the aggregate stock market and aggregate labor income. The paper finds that aggregate stock market risk is the main factor determining excess stock and bond returns, but that the price of stock market risk does not equal the coefficient of relative risk aversion as would be implied by the static Capital Asset Pricing Model.

PD December 1993. **TI** International Experiences with Securities Transaction Taxes. **AU** Campbell, John Y.; Froot, Kenneth A. **AA** Campbell: Princeton University and National Bureau of Economic Research. Froot: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4587; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** $5.00. **JE** G10, G15, H20, H22. **KW** Securities Transactions. Brokerage Services. Registration Services.

AB This paper studies the international experience with securities transaction taxes (STTs), using the Swedish and British systems as case studies. We argue that STTs are best thought of as taxes on different resources used in transactions: domestic brokerage services in the case of Sweden, and registration services in the British case. STTs give investors incentives to economize on the taxed resources by shifting trading to foreign markets or untaxed assets, or by reducing the volume of trade. We show that these effects can be important. Estimated revenues from an STT will be correspondingly overstated if they ignore such behavioral effects.

Canes, Brandice J.

PD October 1993. **TI** Following in her Footsteps? Women's College Majors and Faculty Gender Composition. **AU** Canes, Brandice J.; Rosen, Harvey S. **AA** Canes: Stanford University. Rosen: Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 321; Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 17. **PR** $1.50. **JE** I21, J16. **KW** Women Students. Female Representation. Choice of Major.

AB It is frequently asserted that a college's female undergraduate enrollment in the sciences and engineering can be increased by raising female representation on the faculties in these areas. Despite the widespread acceptance of this proposition, it does not appear to have been subjected to any kind of serious statistical analysis. In this paper, we assemble panel data from three rather different educational institutions, and use them to examine the relationship between the gender composition of the students in an academic department and the gender composition of its faculty at the time the students were choosing their majors. We find no evidence for the conventional view that an increase in the share of females on a department's faculty leads to an increase in its share of female majors.

Canova, Fabio

PD October 1993. **TI** Statistical Inference in Calibrated Models. **AA** Brown University and Centre for Economic Policy Research. **SR** Brown University Department of Economics Working Paper: 93-42; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 22. **PR** no charge. **JE** C15, C52, C68, E32. **KW** General Equilibrium. Sensitivity Analysis. Calibration.

AB This paper describes a Monte Carlo procedure to assess the performance of calibrated dynamic general equilibrium models. The procedure formalizes the choice of parameters and the evaluation of the model and provides an efficient way to conduct a sensitivity analysis for perturbations of the parameters within a reasonable range. As an illustration the methodology is applied to two problems: the equity premium puzzle and how much of the variance of actual U.S. output is explained by a real business cycle model.

PD November 1993. **TI** International Consumption Risk Sharing. **AU** Canova, Fabio; Ravn, Morten O. **AA** Ravn: University of Aarhus. Canova: Brown University and Centre for Economic Policy Research. **SR** Aarhus Institute of Economics Memo: 1994-4; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 27. **PR** no charge. **JE** D81, E32, E21, F21. **KW** Consumption Insurance. International Investment. Capital Mobility.

AB This paper examines whether or not consumption risk sharing occurs in a panel of industrialized countries. We theoretically derive the international consumption insurance proposition in a simple setup and show how it should be modified in more complicated models. We empirically analyze the implications of the proposition for pairs of countries over cycles of different length and find that aggregate domestic consumption is completely insured against idiosyncratic real, demographic, fiscal and monetary shocks, but that it covaries

with domestic variables over long or infinite cycles. Also, the cross equation restrictions imposed by the theory are in general, rejected. The policy implications of the results are discussed.

PD November 1993. TI International Consumption Risk Sharing. AU Canova, Fabio; Ravn, Morten O. AA Canova: Brown University. Ravn: University of Aarhus. SR Brown University Department of Economics Working Paper: 93-43; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 27. PR no charge. JE D81, E32, F21, E21. KW Consumption Insurance. International Investment. Capital Mobility.
AB See other entry.

PD December 1993. TI Are Seasonal Patterns Constant Over Time? A Test for Seasonal Stability. AU Canova, Fabio; Hansen, Bruce E. AA Canova: Brown University and Centre for Economic Policy Research. Hansen: University of Rochester. SR Brown University Department of Economics Working Paper: 93-44; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 25. PR no charge. JE C22, C12. KW Seasonality. Unit Roots. Lagrange Multiplier Tests.
AB This paper introduces Lagrange multiplier (LM) tests to distinguish stationary forms of seasonality from non-stationary seasonal fluctuations. We introduce tests of the null hypothesis of no unit roots at seasonal frequencies against the alternative of a unit root at either a single seasonal frequency or a set of seasonal frequencies. The tests complement those of Dickey, Hasza and Fuller and Hylleberg, Engle, Granger and Yoo which examine the null of seasonal unit roots. We also construct test statistics for the null of constant seasonal patterns against the alternative of martingale variation in the seasonal intercepts. We derive an asymptotic distribution theory for the tests, show how to make them robust to serial correlation and heteroskedasticity under the null, and investigate their size and power with a Monte Carlo exercise. Application of the tests to a standard set of seasonal variables shows that in many cases seasonality appears to be evolving in a nonstationary way.

Carson, Richard
PD November 1993. TI On the Creation and Destruction of Public Goods: The Matter of Sequencing. AU Carson, Richard; Flores, Nicholas E.; Hanemann, W. Michael. AA Carson and Flores: University of California, San Diego. Hanemann: University of California, Berkeley. SR University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 690; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. PG 15. PR $5.00. JE H41. KW Willingness to Pay. Public Goods.
AB We consider sequences where a subset of public goods are systematically being created or destroyed. For the case of strict Hicksian substitutes between all pairs of this subset of public goods, we show that willingness to pay for an increase in a particular public good is strictly decreasing the farther out in a sequence it is valued. For the destruction of public goods the reverse is true for willingness to accept compensation. Thus, sequencing has opposite implications for the assessment of the benefits of providing public goods and for the assessment of the damages from destroying them.

Case, Anne
TI Does Electoral Accountability Affect Economic Policy Choices? Evidence From Gubernatorial Term Limits. AU Besley, Timothy; Case, Anne.

Cason, Timothy N.
PD November 1993. TI EPA's New Emissions Trading Mechanism: A Laboratory Evaluation. AU Cason, Timothy N.; Plott, Charles R. AA Cason: University of Southern California. Plott: California Institute of Technology. SR Caltech Social Science Working Paper: 863; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. PG 29. PR no charge. JE Q25, Q28. KW Pollution Permits. Environment.
AB The EPA has designed a new call auction institution for trading allowances to emit sulfur dioxide. This paper reports twelve laboratory markets that investigate trader behavior in this new institution and evaluate its performance relative to the more commonly observed uniform price call market. We find that the uniform price call market (1) is more efficient, (2) induces more truthful revelation of underlying values and costs, (3) provides more accurate price information, and (4) is more responsive to and recovers more quickly from changes in underlying market conditions. All of these differences result from the intense strategic manipulation incentives of the EPA auction. Under the EPA auction rules both buyers and sellers misrepresent their true value of the emission permits, which biases market-clearing prices downwards. This suggests that the EPA auction will provide poor price signals to the evolving allowance market.

Cass, David
PD November 1993. TI Pareto Improving Financial Innovation in Incomplete Markets. AU Cass, David; Citanna, Alessandro. AA University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-27; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. PG 20. PR no charge. JE D52, D61. KW Financial Innovation. Heterogeneous Households. Welfare Analysis.
AB In this paper we develop a differential technique for investigating the welfare effects of financial innovation in incomplete markets. Utilizing this technique, and after parameterizing economies by both endowments and utility functions, we establish the following (weakly) generic property: Provided that the degree of market incompleteness is sufficiently larger than the extent of household heterogeneity, there is an asset whose introduction can make every household better off (and, symmetrically, one whose introduction can make them all worse off). We also devise a nonparametric procedure for reducing extensive household heterogeneity to manageable size, a procedure which not only makes our restriction on market incompleteness more acceptable, but could also be useful in other applications involving smooth welfare analysis.

Cech, Paula-Ann
PD 1993. TI An Experimental Study of Cost-Sharing Contracts for Procurement: Market Performance Results. AU Cech, Paula-Ann; Cox, James C.; Isaac, R. Mark; Conn, David. AA Cech: Northwestern University. Cox, Isaac, and

Conn: University of Arizona. SR University of Arizona Economics Working Paper: 93-9; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. PG 18. PR $2 Canada and U.S.; $3 Overseas by air. JE D44, L14. KW Auctions. Procurement Contracts. Moral Hazard.
AB We present the market performance results of experiments with fixed-price and cost-sharing contracts for procurement. Contracts are awarded with first-price sealed-bid and second-price sealed-bid auctions. The environment contains post-auction cost uncertainty and opportunities for unmonitored efforts in contract cost reduction. We find that cost-sharing contracts do reduce procurement expense, but they also are socially inefficient, resulting in moral-hazard waste, cost overruns, and even bankruptcies.

Chatterjee, Satyajit
PD November 1993. TI Inventories, Production Smoothing, and Anticipated Demand Variations. AU Chatterjee, Satyajit; Ravikumar, B. AA Chatterjee: Federal Reserve Bank of Philadelphia. Ravikumar: University of Virginia. SR Federal Reserve Bank of Philadelphia Research Working Paper: 93-29; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG 16. PR no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE E22. KW Capital Accumulation. Production Smoothing. Inventories.
AB We augment the Cass-Koopmans single sector capital accumulation model with perfectly foreseen periodic variations in the marginal utility of consumption. We show that if these variations are not too large then it is optimal to meet the changes in demand through changes in the stock of productive capital rather than through finished goods inventories. We also show that the above result holds for empirically plausible parameter values. Our findings throw a different light on the observed lack of production smoothing at seasonal frequencies.

PD December 1993. TI Entry and Exit, Product Variety and the Business Cycle. AU Chatterjee, Satyajit; Cooper, Russell W. AA Chatterjee: Federal Reserve Bank of Philadelphia. Cooper: Boston University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4562; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR $5.00. JE D21, D20, D23, D92, L15. KW Entry and Exit. Technology. Product Variety.
AB We study the stochastic behavior of a dynamic general equilibrium model with monopolistic competition. Each seller sells his product in the consumption goods as well as the investment goods market and has market power in both. Consumers derive utility from a CES aggregate of all the investment goods. We analyze the equilibrium of this economy allowing for an endogenous determination of the number of firms and therefore of products. The principal effect we highlight is the endogenous propagation and magnification of technology and preference disturbances through product space variations.

PD December 1993. TI Entry and Exit, Product Variety and the Business Cycle. AU Chatterjee, Satyajit; Cooper, Russell W. AA Chatterjee: Federal Reserve Bank of Philadelphia. Cooper: Boston University. SR Federal Reserve Bank of Philadelphia Research Working Paper: 93-30;

Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG 32. PR no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE D51, D43, L13, E32, L16. KW Monopolistic Competition. Technology Shocks. Product Diversity.
AB See other entry.

Chaudhuri, Prabal Ray
PD November 1993. TI Stability in Generalised Assignment Models: Some Concepts and an Application to Technology Transfer. AA Indian Statistical Institute. SR Universite Catholique de Louvain CORE Discussion Paper: 9344; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 23. PR not available. JE O33, F12. KW Assignment Model. Technology Transfer. Bargaining Power.
AB We consider a generalized assignment model where the payoffs depend on the number of matchings that take place. We define several notions of stability, where these notions differ in the way the agents perceive their payoffs following a deviation. We show that if the agents are very pessimistic regarding their deviation payoffs, then a stable outcome always exists. We then apply these concepts to a model of technology transfer between domestic and foreign firms. We find that if the bargaining power lies completely with the foreign firms, then all the domestic firms lose out as a result of technology transfer. Moreover, the domestic firms that do adopt the new technology may even do worse compared to the domestic firms that do not.

Chauduri, Prabol Ray
PD May 1993. TI Non-Cooperative Implementation in an Assignment Model. AA Universite Catholique de Louvain and Indian Statistical Institute. SR Universite Catholique de Louvain CORE Discussion Paper: 9322; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. PG 45. PR not available. JE C70, C72. KW Assignment Model. Implementation.
AB This paper examines non-cooperative implementation of stable outcomes in an assignment model. We find that there are two critical features that ensure stability - that the responders can hold more than one offer at the same time and that the proposers cannot renege on their offer once some agent pair leaves the market. We show that in a model where both criteria are satisfied we obtain a stable outcome. In a model satisfying the first but not the second criteria stability is not obtained. In the dynamic version with an aspiration generation process, however, we obtain stability in the limit. If both criteria fail, we find that neither an aspiration generation process nor both sided bargaining can lead to stable outcomes.

Chen, Yan
PD October 1993. TI The Groves-Ledyard Mechanism: An Experimental Study of Institutional Design. AU Chen, Yan; Plott, Charles R. AA California Institute of Technology. SR Caltech Social Science Working Paper: 867; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. PG 19. PR no charge. JE H41. KW Public Goods. Punishment Parameter. Mechanism Design.
AB The Groves-Ledyard mechanism theoretically can solve

reasoning for this is that a firm in difficulty will exit sooner if it is the proprietors' own assets rather than the bank's which are wasting away. An alternative explanation of the correlation between house prices and VAT registrations is that both series move in response to financial deregulation. This hypothesis is undermined by the fact that the relationship shows up in regional cross-section data. Overall the collateral story seems to make the most sense of the facts. Since we report evidence that businesses formed in response to increases in the value of housing assets seem to be of at least average quality as measured by survival chances, there appears to be a large pool of untapped entrepreneurial talent.

Blackburn, McKinley

TI The Worker Adjustment and Retraining Notification Act: Effects on Notice Provision. AU Addison, John T.; Blackburn, McKinley.

Blaug, Mark

PD July 1993. TI Why I am not a Constructivist, or Confessions of an Unrepentant Popperian. AA University of Exeter. SR University of Exeter Department of Economics Discussion Paper: 93/07; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 41. PR no charge. JE B40, B41. KW Economic Methodology. Scientific Methodology. Methodology.
AB A defense of Popperian falsificationism and Lakatos' methodology of "scientific research programmes" against recent denials of their applicability to economics. The question depends critically on whether and in what sense there has been progress in economics. Much of the paper is devoted to examining this issue of "progress of knowledge" in economics.

PD July 1993. TI Is the Quantity Theory of Money True? AA University of Exeter. SR University of Exeter Department of Economics Discussion Paper: 93/08; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 28. PR no charge. JE E40. KW Quantity Theory. Money Supply.
AB What reasons do we have for believing in the quantity theory of money, one of the oldest and long-lived theories in the whole of economics? Is it that the theory is so theoretically compelling? By no means: it is actually a rather loose, open-ended theoretical argument about the causal influence of the supply of money on the level of prices. Nevertheless, it is supported by an overwhelming body of empirical evidence and in that sense is about as true as any theory of economics is ever likely to be. It is facts and not analytical rigor that makes the quantity theory of money good economics. I venture to assert that this is so with most of not all economic theories.

Blommestein, Hans J.

PD October 1993. TI The Role of Financial Institutions in the Transition to a Market Economy. AU Blommestein, Hans J.; Spencer, Michael G. AA Blommestein: International Monetary Fund and OECD. Spencer: International Monetary Fund. SR International Monetary Fund Working Paper: 93/75; International Monetary Fund, Washington, DC 20431. PG 34. PR not available. JE G20, G30, P20. KW Financial Institutions. Financial Sector. Transition.
AB Financial institutions intermediate between savers and investors and contribute to corporate governance. Equity and bond markets in the former centrally planned economies are not yet in a position adequately to provide these services. It is not yet clear that investment funds will provide the necessary financing and corporate management. Therefore the first priority for financial sector reforms must be to establish a healthy commercial banking sector. Banks are the most promising source of financing, provide payment services which are crucial to both the real and financial sectors and, by monitoring the use of loaned funds, will be the primary source of corporate governance during the transformation to a market economy.

Bloom, David E.

TI The Influence of Nonmarital Childbearing on the Formation of First Marriages. AU Bennett, Neil G.; Bloom, David E.; Miller, Cynthia K.

PD December 1993. TI Language, Employment, and Earnings in the United States: Spanish-English Differentials From 1970 to 1990. AU Bloom, David E.; Grenier, Gilles. AA Bloom: Columbia University and National Bureau of Economic Research. Grenier: University of Ottawa. SR National Bureau of Economic Research Working Paper: 4584; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 21. PR $5.00. JE J31, J15, Z10. KW Wage Differentials. Language. Employment.
AB This paper analyzes employment and earnings differentials between Spanish speakers and English speakers in the United States, using data from the 1970, 1980, and 1990 U.S. censuses. The results show that Spanish speakers, both men and women, do not perform as well in the labor market as English speakers. The results also reveal that Spanish-English earnings and unemployment differentials increased slightly in the 1970s, most likely because of rapid growth in the number of Spanish speakers. By contrast, these differentials increased sharply in the 1980s, also a period of rapidly increasing supply. However, there is no evidence that the widening of differentials in the 1980s reflects an increase in the labor market rewards to English language proficiency. Rather, they appear to be result of Spanish speakers having relatively little of those labor market characteristics, most notably education, whose market value increased dramatically during the 1980s.

Bonanno, Giacomo

PD April 1994. TI Knowledge, Rationality and Equilibrium in Extensive Games. AA University of California, Davis and Harvard University. SR University of California at Davis Economics Department Working Paper: 94-6; Department of Economics, University of California, Davis, CA 95616-8578. PG 38. PR $3.00 U.S. and Canada. $4.00 International. JE C72, D83. KW Common Knowledge. Rationality. Extensive Form Games.
AB It is argued that a natural model for the study of epistemic matters in the context of extensive games in one where the set of "states" is given by the set of decision nodes. This requires extending the definition of extensive game by adding, for every player, a partition of the set of nodes. A further addition is made, namely the specification of a plan of action for every player at every node. A player is defined to be irrational at a node if she has a better plan at that node and she knows this. The main results are the following: (1) in games with perfect information, rationality of all the players at every node is necessary and sufficient for subgame-perfection; (2) in

games with imperfect information it is possible to have common knowledge of rationality at every node and yet not subgame-perfection; (3) for a fairly general class of games, rationality of all the players at the root is necessary and sufficient for Nash equilibrium; (4) for a fairly general class of games and a natural class of information partitions, rationality of all the players at every node is sufficient for subgame perfection.

Bordo, Michael D.

PD November 1993. TI A Comparison of the United States and Canadian Banking Systems in the Twentieth Century: Stability vs. Efficiency. AU Bordo, Michael D.; Rockoff, Hugh; Redish, Angela. AA Rutgers University and National Bureau of Economic Research. Redish: University of British Columbia. SR National Bureau of Economic Research Working Paper: 4546; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 21. PR $5.00. JE G20, G21, G28. KW Canadian Banking. Banking Systems. Market Power.
AB This paper asks whether the vaunted comparative stability of the Canadian banking system has been purchased at the cost of creating an oligopoly. We assembled a data set that compares bank failures, lending rates, interest paid on deposits and related variables over the period 1920-1980. Our principal findings are that: (1) interest rates paid on deposits were generally higher in Canada;(2) interest income received on securities was generally slightly higher in Canada; (3) interest rates charged on loans were generally quite similar; (4) net rates of return to equity were generally higher in Canada than in the U.S.

TI Rules, Discretion, and Central Bank Independence: The German Experience 1880-1989. AU Eschweiler, Bernhard; Bordo, Michael D.

Borenstein, Severin

TI Dynamic Pricing in Retail Gasoline Markets. AU Shepard, Andrea; Borenstein, Severin.

PD October 1993. TI Dynamic Pricing in Retail Gasoline Markets. AU Borenstein, Severin; Shepard, Andrea. AA Borenstein: University of California, Davis and National Bureau of Economic Research. Shepard: Stanford University and National Bureau of Economic Research. SR University of California at Davis Economics Department Working Paper: 93-21; Department of Economics, University of California at Davis, CA 95616-8578. PG 29. PR $3.00 U.S. and Canada. $4.00 International. JE L13, L16, L62. KW Implicit Collusion. Gasoline. Dynamic Pricing.
AB This paper tests for price patterns in retail gasoline markets consistent with those predicted by models of implicit collusion among firms. Recent supergame models show that the highest supportable collusive price is a function of today's profit relative to expected future profit: collusive prices are higher when predictable changes in demand or cost lead firms to expect that collusive profits are increasing rather than declining. Ceteris paribus, collusive profits will be expected to increase when demand is expected to increase and/or costs are expected to decline. Using panel data on sales volume, and retail and wholesale prices in 59 cities over 72 months, we find results consistent with these predictions. Controlling for current demand and input price, the elasticity of current retail margins with respect to expected next-month demand is about 0.37. The

elasticity of current margins with respect to next-month wholesale price is about -0.37. The results are inconsistent with inventory effects.

Borjas, George J.

PD December 1993. TI Foreign Competition, Market Power, and Wage Inequality: Theory and Evidence. AU Borjas, George J.; Ramey Valerie A. AA University of California, San Diego and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4556; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 27. PR $5.00. JE D40, L11, J31, F10. KW Wage Inequality. Foreign Competition. Industry Concentration.
AB In this paper, we present theory and evidence on the link between wage inequality and foreign competition in concentrated industries. We develop a simple model in which the impact of foreign competition on the relative wages of an economy depends on the market structure of the industry penetrated. We show that the more concentrated is the industry, the greater is the impact of trade on general wage inequality. We use the theory to argue why import competition in an industry such as automobiles is much more deleterious to the wages of the less educated than import competition in an industry such as apparel. We then test our hypothesis using a panel data set on relative wages across SMSA's. We reinterpret our model as a model of local economies, and test it using both the cross-sectional and time-series variation across labor markets.

Brainard, S. Lael

PD December 1993. TI An Empirical Assessment of the Proximity-Concentration Tradeoff Between Multinational Sales and Trade. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4580; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 41. PR $5.00. JE F10, F13, L10. KW Transport Costs. Investment Barriers. Scale Economies. Overseas Production.
AB This paper empirically investigates the role of transport costs, trade and investment barriers, production scale economies, and firm-specific advantages in determining the use of overseas production relative to exports. The proximity-concentration hypothesis is robust in explaining the share of total sales accounted for by affiliate sales: this share is greater the higher are transport costs and trade barriers and the lower are plant scale economies and investment barriers. Although strictly speaking, the proximity-concentration hypothesis applies to the shares of affiliate sales and exports rather than the levels, the effects of trade and investment barriers on the levels are similar to their effects on the shares, controlling for simultaneity, and so is that of freight factors in the trade estimates. The elasticity of inward and outward net affiliate sales with respect to tariffs is around 0.45, and that with respect to NTB's is an additional 0.17. The elasticity of both imports and exports with respect to freight factors is -1. However, the effect of freight factors on the level of affiliate sales is not robust, and the probability of observing any affiliate sales is increasing in proximity.

PD December 1993. TI An Empirical Assessment of the Factor Proportions Explanation of Multinational Sales. AA Massachusetts Institute of Technology and National

Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4583; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** $5.00. **JE** F23. **KW** Multinational Firms. Factor Proportions. Exports.
AB This paper provides empirical evidence that challenges the factor proportions explanation of multinational activity. The same tests on intra-industry rations and total volumes that were used to demonstrate that a substantial part of trade is explained by factor proportions and income similarities rather than differences are applied to affiliate sales with surprisingly similar results. Some support for the factor proportions hypothesis is derived by comparing affiliate production destined for export to the parent's market, which is the category of activity most likely to be motivated by factor proportions considerations, with that destined for sale in the local market. Affiliate production destined for export home is moderately more responsive to factor proportions differences. However, the two types of activity differ more in their responses to transport costs and destination market income. Overall, the evidence suggests that only a small part of multinational activity into and out of the U.S. in the late 1980's can be explained by factor proportions differences.

Brayton, Flint
TI Prices, Wages, and Employment in the U.S. Economy: A Traditional Model and Tests of Some Alternatives. **AU** Ando, Albert; Brayton, Flint.

Brennan, Geoffrey
PD August 1993. **TI** Rationalizing Parliamentary Systems. **AU** Brennan, Geoffrey; Hamlin, Alan. **AA** Brennan: Australian National University. Hamlin: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9313; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 24. **PR** no charge. **JE** D72, H11. **KW** Parliament. Political Parties. Electoral Competition.
AB Public choice analysis of democratic political institutions focuses on the issues that are most salient under U.S. constitutional arrangements. Parliamentary systems offer different institutional arrangements and different changes to the Public Choice approach. We outline a Public Choice account of parliamentary democracy which concentrates attention on the roles of electoral competition and disciplined political parties, while also offering a discussion of parliamentary procedure. The Public Choice approach is contrasted with the mainstream view of representative, responsible government in which disciplined political parties are often seen as a threat to parliamentary democracy.

PD August 1993. **TI** A Revisionist View of the Separation of Powers. **AU** Brennan, Geoffrey; Hamlin, Alan. **AA** Brennan: Australian National University. Hamlin: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9314; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 30. **PR** no charge. **JE** D72, H11. **KW** Constitution. Political Institutions.
AB The doctrine of the separation of powers attracts almost universal support as a central element of the liberal constitution designed to protect citizens against governmental power. However, there is little agreement on, or analysis of, the precise institutional requirements of the doctrine or the method by which the claimed benefit is achieved. We set out a simple model of the interaction between citizen-voters, the legislature and the executive to illustrate that the functional division of powers can operate systematically against the interests of citizen-voters. This case provides the basis for both a taxonomy of distinct senses of the separation of powers, and for the revisionist claim that there is a general liberal presumption against the functional separation of powers.

Brenner, Menachem
PD October 1993. **TI** Implied Foreign Exchange Rates Using Option Prices. **AU** Brenner, Menachem; Landskroner, Yoram. **AA** Brenner: New York University. Landskroner: Hebrew University of Jerusalem and New York University. **SR** New York University Salomon Brothers Working Paper: S-93-53; Salomon Brothers Center for the Study of Financial Institutions, Graduate School Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 18. **PR** not available. **JE** F31, G13, G18. **KW** Foreign Exchange Market. Black Market. Currency Options.
AB Many countries around the globe impose restrictions on foreign exchange transactions and maintain an official exchange rate. In these countries we usually find an active black market for foreign exchange. This market, however, does not replace the official market since most financial institutions and business entities involved in international trade can transact in the official market. The existence of restrictions and controls may cause the official rate to diverge from the equilibrium rate. It is difficult to determine whether the black market provides a better estimate of the equilibrium exchange rate. The introduction of derivative instruments on foreign exchange, open to all market participants, may provide us with a clue. The main objective of this paper is to use currency call options prices to make inferences regarding equilibrium exchange rates. A second objective is to examine the relationship between volatility of the exchange rate and expectations of government-induced devaluation of the home currency.

Brenner, Robin J.
PD June 1993. **TI** Arbitrage, Cointegration and Testing for Simple Efficiency in Financial Markets. **AU** Brenner, Robin J.; Kroner, Kenneth F. **AA** University of Arizona. **SR** University of Arizona Economics Working Paper: 93-4; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. **PG** 14. **PR** $2 Canada and U.S.; $3 Overseas by air. **JE** G12, G14, C22. **KW** Currency Markets. Commodity Markets. Unbiasedness Hypothesis.
AB Many researchers have found that spot and forward (future) rates in currency markets are cointegrated with cointegrating vector (1,-1), while they are not cointegrated in commodity markets. In this paper we use a no-arbitrage pricing rule to show that the existence of cointegration depends on the time series properties of the cost-of-carry, and argue that the conditions for cointegration are more likely to hold in currency markets than in commodity markets. We discuss several implications of our model (such as why the forward rate forecast error, the basis and the forward premium are serially correlated), but emphasize the implications on empirical tests of the "simple efficiency hypothesis" in financial markets. This

hypothesis is so prevalent in the finance literature that many tests for it have been developed. We examine four of the common tests and use our cointegration results to demonstrate why each of these tests should reject the null hypothesis of simple efficiency. The results from the existing empirical literature strongly support our hypotheses.

PD September 1993. TI Another Look at Alternative Models of the Short-Term Interest Rate. AU Brenner, Robin J.; Harjes, Richard H. AA University of Arizona. SR University of Arizona Economics Working Paper: 93-5; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. PG 12. PR $2 Canada and U.S.; $3 Overseas by air. JE E43, G14, C52. KW Interest Rate Volatility. Interest Rate Dynamics. Information Shocks.
AB The short-term rate of interest is crucial for much of theoretical and empirical finance. Yet no consensus has emerged on either the dynamics of the interest rate level or the dynamics of its volatility. We introduce a new flexible functional form for the dynamics of short-term interest rate volatility which nests several competing interest rate models. Our model uses time-varying parameters to allow interest rate volatility to depend on both rate levels and information shocks to the market. Using Wooldridge's (1990) robust conditional moment tests, we compare our model to other models popular in the literature, and find that it performs better by any reasonable statistical standard. Two important conclusions may be drawn from this paper. First, the importance of interest rate volatility on levels has been exaggerated in the literature. While this relationship is important, adequately modeling the volatility as a function of unexpected "news" is more important. We also conclude that existing theoretical models of interest rates are misspecified with respect to volatility.

Brennscheidt, Gunnar
PD October 1993. TI Predictive Behavior: An Experimental Study. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: B-261; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG 35. PR no charge. JE C12, C91, C92, D83. KW Learning Behavior. Rational Expectations. Laboratory Experiments.
AB This paper describes a series of laboratory experiments which were focused on the influence of exogenous variables on forecasting behavior. In all experiments, the time series to be forecasted was generated by a linear econometric model involving two or three artificial exogenous variables. This design provides an optimal background for testing rational expectations and least-squares learning. As expected, these hypotheses do not explain observed forecasting behavior satisfactorily. Some phenomena closely related to this lack of rationality are studied: Concentration on changes rather than on levels, underestimation of changes, and upward bias. The rule "previous value plus half of the statistically expected change" provides a good explanation of observed forecasting behavior. Some learning behavior is observed within the first 20 periods. Finally, some determinants of the dispersion of forecasts are studied.

Brezis, Elise S.
PD December 1993. TI Technology and the Life Cycle of Cities. AU Brezis, Elise S.; Krugman, Paul. AA Brezis: Bar-Ilan University. Krugman: Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4561; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 16. PR $5.00. JE O30, R30, R11. KW Technological Change. Cities. Industry Location.
AB During time of major technological change leading cities are often overtaken by upstart metropolitan areas. Such upheavals may be explained if the advantage of established urban centers rests on localized learning-by-doing. When a new technology for which this accumulated experience is irrelevant is introduced, older centers prefer to stay with a technology in which they are more efficient. New centers, however, turn to the new technology, and are competitive despite the raw state of that technology because of their lower land rents and wages. Over time, as the new technology matures, the established cities are overtaken.

PD December 1993. TI Immigration, Investment, and Real Wages. AU Brezis, Elise S.; Krugman, Paul. AA Brezis: Bar-Ilan University. Krugman: Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4563; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 16. PR $5.00. JE F22, E22, J30. KW Immigration. Self-Fulfilling Prophecy. Investment. Real Wages.
AB When a country is the recipient of large-scale, politically motivated immigration - as has been the case for Israel in recent years - the initial impact is to reduce real wages. Over the longer term, however, the endogenous response of investment, together with increasing returns, may well actually increase real earnings. If immigration itself is not wholly exogenous, but responds to real wages, there may be multiple equilibria. That is, optimism or pessimism about the success of the economy at absorbing immigrants may constitute a self-fulfilling prophecy.

Brown, Donald J.
PD December 1993. TI Walrasian Comparative Statics. AU Brown, Donald J.; Matzkin, Rosa. AA Brown: Stanford University. Matzkin: Northwestern University. SR Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-424; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG 20. PR no charge. JE D51. KW General Equilibrium. Quantifier Elimination.
AB We present a finite system of polynomial inequalities in unobservable endogenous variables and market data that observations on market prices, individual incomes and aggregate endowments must satisfy to be consistent with equilibrium behavior of some pure exchange economy. We also derive a corresponding family of polynomial inequalities for production economies. For these economies, we give necessary and sufficient conditions in terms of observations on market prices, aggregate endowments, individual profit shares, and individuals' income from their endowments for these observations to be consistent with the equilibrium behavior of some production economy. We use quantifier elimination to derive for both the two-person model of pure exchange and the two-sector general equilibrium model comparative statics relationships between two observations on market data that are necessary and sufficient for the existence of utility functions and production functions which are consistent with equilibrium

behavior in the pure exchange economy and the two-sector model.

Broze, Laurence

PD July 1993. **TI** Testing for Continuous-Time Models of the Short-Term Interest Rate. **AU** Broze, Laurence; Scaillet, Olivier; Zakoian, Jean-Michel. **AA** Broze: Universite Catholique de Louvain and Universite de Lille. Scaillet: Universite Libre de Bruxelles. Zakoian: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9331; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 17. **PR** not available. **JE** E43, E44. **KW** Term Structure. Short-Term Interest Rate.
AB The recent financial literature has been much concerned with the short-term interest rate. Several models have been proposed and studied quite extensively. Despite the number of models, relatively little is known about their empirical comparison. A first approach of this problem is proposed in Chan, Karolyi, Longstaff and Sanders (1992) using a Generalized Method of Moments. In this paper, we give a general form encompassing the most usual models and derive a well specified discrete time version. Then we study the ergodic properties in order to build a consistent econometric procedure based on a maximum likelihood approach. An empirical comparison is performed using U.S. Treasury Bill data. Finally, we propose an estimation strategy, based on a two-step indirect simulated method, to account for the discretization bias.

Bulkley, George

PD November 1992. **TI** A Cross-Section Test of the Present-Value Model for U.S. Stock Prices. **AU** Bulkley, George; Taylor, Nick. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 92/11; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** 41. **PR** no charge. **JE** C22, C50, G12, G14. **KW** Rational Expectations. Present Value. Volatility. Returns. Vector Autoregression.
AB No abstract available.

Bunke, Olaf

PD June 1993. **TI** Model Selection and Variable Transformations in Nonlinear Regression. **AU** Bunke, Olaf; Droge, Bernd; Polzehl, Jorg. **AA** Bunke: Humboldt Universitat zu Berlin. Droge and Polzehl: Universite Catholique de Louvain and Humboldt-Universitat zu Berlin. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9327; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 27. **PR** not available. **JE** C50, C80. **KW** Experimental Data. Model Selection. Nonlinear Regression Models.
AB The results of analyzing experimental data using a parametric model may heavily depend on the chosen model. In this paper we propose procedures for the adequate selection of nonlinear regression models if the intended use of the model is among the following: prediction of future values of the response variable, estimation of the unknown regression function, calibration or estimation of some parameter with a certain meaning in the corresponding field of application. The performance of the selected model is discussed, and several examples illustrate the behavior of the procedures. Programs written in Splus for handling such problems for selecting

problems are described as well. Moreover, we propose a procedure for selecting an appropriate nonlinear transformation of the observations which may lead to an improved accuracy.

Cahuzac, E.

PD May 1993. **TI** Examining the Econometric Relevance of Discretizing Panel Data: An Application to the Belgian Labour Market. **AU** Cahuzac, E.; Mouchart, M.; Van Der Linden, B. **AA** Cahuzac: Universite Catholique de Louvain. Mouchart: CORE and Institute de Statistique, Universite Catholique de Louvain. Van der Linden: National Fund for Scientific Research, BELGIUM and Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9318; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 30. **PR** not available. **JE** C23, C25, C41. **KW** Panel Data. Discrete Data. Duration Data.
AB The object of this paper is to explore how to use administrative data for econometric purposes when these data measure total annual duration spent in various states. A basic issue addressed in this paper is to check whether the information extracted through categorizing continuous data actually defines an economically meaningful concept of an individual position on the labour market. The main findings are first that discretization indeed leads to interpretable transitions on the labour market and second that the mobility between positions is rather low in Belgium.

Calomiris, Charles W.

PD December 1993. **TI** Is the Discount Window Necessary? A Penn-Central Perspective. **AA** University of Illinois at Urbana-Champaign and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4573; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** $5.00. **JE** E50, G20, G32, E65. **KW** Discount Window. Financial Crises. Commercial Paper.
AB The discount window has been under attack recently as a costly and unnecessary tool of policy. This paper argues that the primary role of the discount window should be to provide occasional, temporary support to particular financial markets during localized financial crises. The benefits of the discount window revolve around information externalities across firms resulting from confusion over the incidence of bad news, or reductions in the net worth of market intermediaries. The history of the Penn Central commercial paper crisis of 1970, and the Fed's use of the discount window to combat that crisis, are reviewed. The crisis is visible in a pronounced decline in outstanding commercial paper, an increase in the interest rate spreads for commercial paper and for long-term debt, and declines in stock prices. Cross-sectional variation in abnormal stock returns indicates that, controlling for other factors, firms that were likely to have had outstanding debt in the form of commercial paper suffered larger negative returns during the onset of the crisis, and larger positive returns after the Fed intervened to lower the cost of commercial paper rollover. Implications of the 1970 crisis for current financial markets, and for discount window policy, are considered in light of this evidence.

Cameron, A. Colin

PD December 1993. **TI** R-Squared Measures for Count Data Regression Models with Applications to Health Care

Utilization. **AU** Cameron, A. Colin; Windmeijer, Frank A. G. **AA** Cameron: University of California, Davis. Windmeijer: Australian National University. **SR** University of California at Davis Economics Department Working Paper: 93-24; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 17. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** C52, C20, I12. **KW** Goodness of Fit. Poisson Regression. Deviance.
AB R-squared measures of goodness of fit for count data are rarely, if ever, reported in empirical studies or by statistical packages. We propose several R-squared measures based on various definitions of residuals, for the basic Poisson regression model and for more general models such as negative binomial that accommodate overdispersed data. Use of these measures is generally more informative than the current practice of not computing an R- squared. The preferred R-squared is based on the deviance residual. An application to data from the 1977-78 Australian health survey reveals that health status variables, especially recent health, are much more important than socioeconomic characteristics and health insurance status in determining the number of doctor consultations in the past two weeks. This application illustrates the performance and usefulness of the various R-squareds.

Campbell, John Y.

PD November 1993. **TI** Understanding Risk and Return. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4554; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** $5.00. **JE** G10, G12. **KW** Asset Pricing. Stock Market Risk. CAPM.
AB This paper uses an intertemporal equilibrium asset pricing model to interpret the cross-sectional pattern of stock and bond returns. The model relates assets' mean returns to their covariances with the contemporaneous return and news about future returns on the market portfolio. In a departure from standard practice, the market portfolio return is measured using data on both the aggregate stock market and aggregate labor income. The paper finds that aggregate stock market risk is the main factor determining excess stock and bond returns, but that the price of stock market risk does not equal the coefficient of relative risk aversion as would be implied by the static Capital Asset Pricing Model.

PD December 1993. **TI** International Experiences with Securities Transaction Taxes. **AU** Campbell, John Y.; Froot, Kenneth A. **AA** Campbell: Princeton University and National Bureau of Economic Research. Froot: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4587; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** $5.00. **JE** G10, G15, H20, H22. **KW** Securities Transactions. Brokerage Services. Registration Services.
AB This paper studies the international experience with securities transaction taxes (STTs), using the Swedish and British systems as case studies. We argue that STTs are best thought of as taxes on different resources used in transactions: domestic brokerage services in the case of Sweden, and registration services in the British case. STTs give investors incentives to economize on the taxed resources by shifting trading to foreign markets or untaxed assets, or by reducing the volume of trade. We show that these effects can be important. Estimated revenues from an STT will be correspondingly overstated if they ignore such behavioral effects.

Canes, Brandice J.

PD October 1993. **TI** Following in her Footsteps? Women's College Majors and Faculty Gender Composition. **AU** Canes, Brandice J.; Rosen, Harvey S. **AA** Canes: Stanford University. Rosen: Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 321; Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 17. **PR** $1.50. **JE** I21, J16. **KW** Women Students. Female Representation. Choice of Major.
AB It is frequently asserted that a college's female undergraduate enrollment in the sciences and engineering can be increased by raising female representation on the faculties in these areas. Despite the widespread acceptance of this proposition, it does not appear to have been subjected to any kind of serious statistical analysis. In this paper, we assemble panel data from three rather different educational institutions, and use them to examine the relationship between the gender composition of the students in an academic department and the gender composition of its faculty at the time the students were choosing their majors. We find no evidence for the conventional view that an increase in the share of females on a department's faculty leads to an increase in its share of female majors.

Canova, Fabio

PD October 1993. **TI** Statistical Inference in Calibrated Models. **AA** Brown University and Centre for Economic Policy Research. **SR** Brown University Department of Economics Working Paper: 93-42; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 22. **PR** no charge. **JE** C15, C52, C68, E32. **KW** General Equilibrium. Sensitivity Analysis. Calibration.
AB This paper describes a Monte Carlo procedure to assess the performance of calibrated dynamic general equilibrium models. The procedure formalizes the choice of parameters and the evaluation of the model and provides an efficient way to conduct a sensitivity analysis for perturbations of the parameters within a reasonable range. As an illustration the methodology is applied to two problems: the equity premium puzzle and how much of the variance of actual U.S. output is explained by a real business cycle model.

PD November 1993. **TI** International Consumption Risk Sharing. **AU** Canova, Fabio; Ravn, Morten O. **AA** Ravn: University of Aarhus. Canova: Brown University and Centre for Economic Policy Research. **SR** Aarhus Institute of Economics Memo: 1994-4; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 27. **PR** no charge. **JE** D81, E32, E21, F21. **KW** Consumption Insurance. International Investment. Capital Mobility.
AB This paper examines whether or not consumption risk sharing occurs in a panel of industrialized countries. We theoretically derive the international consumption insurance proposition in a simple setup and show how it should be modified in more complicated models. We empirically analyze the implications of the proposition for pairs of countries over cycles of different length and find that aggregate domestic consumption is completely insured against idiosyncratic real, demographic, fiscal and monetary shocks, but that it covaries

with domestic variables over long or infinite cycles. Also, the cross equation restrictions imposed by the theory are in general, rejected, The policy implications of the results are discussed.

PD November 1993. **TI** International Consumption Risk Sharing. **AU** Canova, Fabio; Ravn, Morten O. **AA** Canova: Brown University. Ravn: University of Aarhus. **SR** Brown University Department of Economics Working Paper: 93-43; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 27. **PR** no charge. **JE** D81, E32, F21, E21. **KW** Consumption Insurance. International Investment. Capital Mobility.
AB See other entry.

PD December 1993. **TI** Are Seasonal Patterns Constant Over Time? A Test for Seasonal Stability. **AU** Canova, Fabio; Hansen, Bruce E. **AA** Canova: Brown University and Centre for Economic Policy Research. Hansen: University of Rochester. **SR** Brown University Department of Economics Working Paper: 93-44; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 25. **PR** no charge. **JE** C22, C12. **KW** Seasonality. Unit Roots. Lagrange Multiplier Tests.
AB This paper introduces Lagrange multiplier (LM) tests to distinguish stationary forms of seasonality from non-stationary seasonal fluctuations. We introduce tests of the null hypothesis of no unit roots at seasonal frequencies against the alternative of a unit root at either a single seasonal frequency or a set of seasonal frequencies. The tests complement those of Dickey, Hasza and Fuller and Hylleberg, Engle, Granger and Yoo which examine the null of seasonal unit roots. We also construct test statistics for the null of constant seasonal patterns against the alternative of martingale variation in the seasonal intercepts. We derive an asymptotic distribution theory for the tests, show how to make them robust to serial correlation and heteroskedasticity under the null, and investigate their size and power with a Monte Carlo exercise. Application of the tests to a standard set of seasonal variables shows that in many cases seasonality appears to be evolving in a nonstationary way.

Carson, Richard
PD November 1993. **TI** On the Creation and Destruction of Public Goods: The Matter of Sequencing. **AU** Carson, Richard; Flores, Nicholas E.; Hanemann, W. Michael. **AA** Carson and Flores: University of California, San Diego. Hanemann: University of California, Berkeley. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 690; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 15. **PR** $5.00. **JE** H41. **KW** Willingness to Pay. Public Goods.
AB We consider sequences where a subset of public goods are systematically being created or destroyed. For the case of strict Hicksian substitutes between all pairs of this subset of public goods, we show that willingness to pay for an increase in a particular public good is strictly decreasing the farther out in a sequence it is valued. For the destruction of public goods the reverse is true for willingness to accept compensation. Thus, sequencing has opposite implications for the assessment of the benefits of providing public goods and for the assessment of the damages from destroying them.

Case, Anne
TI Does Electoral Accountability Affect Economic Policy Choices? Evidence From Gubernatorial Term Limits. **AU** Besley, Timothy; Case, Anne.

Cason, Timothy N.
PD November 1993. **TI** EPA's New Emissions Trading Mechanism: A Laboratory Evaluation. **AU** Cason, Timothy N.; Plott, Charles R. **AA** Cason: University of Southern California. Plott: California Institute of Technology. **SR** Caltech Social Science Working Paper: 863; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 29. **PR** no charge. **JE** Q25, Q28. **KW** Pollution Permits. Environment.
AB The EPA has designed a new call auction institution for trading allowances to emit sulfur dioxide. This paper reports twelve laboratory markets that investigate trader behavior in this new institution and evaluate its performance relative to the more commonly observed uniform price call market. We find that the uniform price call market (1) is more efficient, (2) induces more truthful revelation of underlying values and costs, (3) provides more accurate price information, and (4) is more responsive to and recovers more quickly from changes in underlying market conditions. All of these differences result from the intense strategic manipulation incentives of the EPA auction. Under the EPA auction rules both buyers and sellers misrepresent their true value of the emission permits, which biases market-clearing prices downwards. This suggests that the EPA auction will provide poor price signals to the evolving allowance market.

Cass, David
PD November 1993. **TI** Pareto Improving Financial Innovation in Incomplete Markets. **AU** Cass, David; Citanna, Alessandro. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-27; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 20. **PR** no charge. **JE** D52, D61. **KW** Financial Innovation. Heterogeneous Households. Welfare Analysis.
AB In this paper we develop a differential technique for investigating the welfare effects of financial innovation in incomplete markets. Utilizing this technique, and after parameterizing economies by both endowments and utility functions, we establish the following (weakly) generic property: Provided that the degree of market incompleteness is sufficiently larger than the extent of household heterogeneity, there is an asset whose introduction can make every household better off (and, symmetrically, one whose introduction can make them all worse off). We also devise a nonparametric procedure for reducing extensive household heterogeneity to manageable size, a procedure which not only makes our restriction on market incompleteness more acceptable, but could also be useful in other applications involving smooth welfare analysis.

Cech, Paula-Ann
PD 1993. **TI** An Experimental Study of Cost-Sharing Contracts for Procurement: Market Performance Results. **AU** Cech, Paula-Ann; Cox, James C.; Isaac, R. Mark; Conn, David. **AA** Cech: Northwestern University. Cox, Isaac, and

Conn: University of Arizona. SR University of Arizona Economics Working Paper: 93-9; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. PG 18. PR $2 Canada and U.S.; $3 Overseas by air. JE D44, L14. KW Auctions. Procurement Contracts. Moral Hazard.
AB We present the market performance results of experiments with fixed-price and cost-sharing contracts for procurement. Contracts are awarded with first-price sealed-bid and second-price sealed-bid auctions. The environment contains post-auction cost uncertainty and opportunities for unmonitored efforts in contract cost reduction. We find that cost-sharing contracts do reduce procurement expense, but they also are socially inefficient, resulting in moral-hazard waste, cost overruns, and even bankruptcies.

Chatterjee, Satyajit
PD November 1993. TI Inventories, Production Smoothing, and Anticipated Demand Variations. AU Chatterjee, Satyajit; Ravikumar, B. AA Chatterjee: Federal Reserve Bank of Philadelphia. Ravikumar: University of Virginia. SR Federal Reserve Bank of Philadelphia Research Working Paper: 93-29; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG 16. PR no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE E22. KW Capital Accumulation. Production Smoothing. Inventories.
AB We augment the Cass-Koopmans single sector capital accumulation model with perfectly foreseen periodic variations in the marginal utility of consumption. We show that if these variations are not too large then it is optimal to meet the changes in demand through changes in the stock of productive capital rather than through finished goods inventories. We also show that the above result holds for empirically plausible parameter values. Our findings throw a different light on the observed lack of production smoothing at seasonal frequencies.

PD December 1993. TI Entry and Exit, Product Variety and the Business Cycle. AU Chatterjee, Satyajit; Cooper, Russell W. AA Chatterjee: Federal Reserve Bank of Philadelphia. Cooper: Boston University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4562; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR $5.00. JE D21, D20, D23, D92, L15. KW Entry and Exit. Technology. Product Variety.
AB We study the stochastic behavior of a dynamic general equilibrium model with monopolistic competition. Each seller sells his product in the consumption goods as well as the investment goods market and has market power in both. Consumers derive utility from a CES aggregate of all the investment goods. We analyze the equilibrium of this economy allowing for an endogenous determination of the number of firms and therefore of products. The principal effect we highlight is the endogenous propagation and magnification of technology and preference disturbances through product space variations.

PD December 1993. TI Entry and Exit, Product Variety and the Business Cycle. AU Chatterjee, Satyajit; Cooper, Russell W. AA Chatterjee: Federal Reserve Bank of Philadelphia. Cooper: Boston University. SR Federal Reserve Bank of Philadelphia Research Working Paper: 93-30;

Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG 32. PR no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE D51, D43, L13, E32, L16. KW Monopolistic Competition. Technology Shocks. Product Diversity.
AB See other entry.

Chaudhuri, Prabal Ray
PD November 1993. TI Stability in Generalised Assignment Models: Some Concepts and an Application to Technology Transfer. AA Indian Statistical Institute. SR Universite Catholique de Louvain CORE Discussion Paper: 9344; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 23. PR not available. JE O33, F12. KW Assignment Model. Technology Transfer. Bargaining Power.
AB We consider a generalized assignment model where the payoffs depend on the number of matchings that take place. We define several notions of stability, where these notions differ in the way the agents perceive their payoffs following a deviation. We show that if the agents are very pessimistic regarding their deviation payoffs, then a stable outcome always exists. We then apply these concepts to a model of technology transfer between domestic and foreign firms. We find that if the bargaining power lies completely with the foreign firms, then all the domestic firms lose out as a result of technology transfer. Moreover, the domestic firms that do adopt the new technology may even do worse compared to the domestic firms that do not.

Chauduri, Prabol Ray
PD May 1993. TI Non-Cooperative Implementation in an Assignment Model. AA Universite Catholique de Louvain and Indian Statistical Institute. SR Universite Catholique de Louvain CORE Discussion Paper: 9322; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. PG 45. PR not available. JE C70, C72. KW Assignment Model. Implementation.
AB This paper examines non-cooperative implementation of stable outcomes in an assignment model. We find that there are two critical features that ensure stability - that the responders can hold more than one offer at the same time and that the proposers cannot renege on their offer once some agent pair leaves the market. We show that in a model where both criteria are satisfied we obtain a stable outcome. In a model satisfying the first but not the second criteria stability is not obtained. In the dynamic version with an aspiration generation process, however, we obtain stability in the limit. If both criteria fail, we find that neither an aspiration generation process nor both sided bargaining can lead to stable outcomes.

Chen, Yan
PD October 1993. TI The Groves-Ledyard Mechanism: An Experimental Study of Institutional Design. AU Chen, Yan; Plott, Charles R. AA California Institute of Technology. SR Caltech Social Science Working Paper: 867; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. PG 19. PR no charge. JE H41. KW Public Goods. Punishment Parameter. Mechanism Design.
AB The Groves-Ledyard mechanism theoretically can solve

the "free-rider" problem in public good provision. Two questions are of overriding importance in implementing the mechanism. The first is related to the actual performance of the mechanism in general. The second is the choice of a "punishment parameter," gamma, which is the only parameter that is available for those that may want to actually use the mechanism. Thus the determination of the role of this variable on mechanism performance is fundamental for any advances along the lines of actual implementation. In studying the Groves-Ledyard mechanism, we show that the punishment parameter, plays a crucial role in the performance of the mechanism. We show that under the higher punishment parameter, the Groves-Ledyard equilibrium is chosen much more frequently; a higher level of the public good is provided and efficiency is higher. By examining two behavioral models, we show that a higher gamma leads to an increase in the probability of an individual choosing a best response predicted by the model.

Chiarini, Bruno

PD October 1993. TI Persistence, Comovement and Common Trends: An Empirical Study of Disaggregated Italian Output and Labour Input. AA University of Southampton. SR University of Southampton Discussion Paper in Economics and Econometrics: 9317; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. PG 18. PR no charge. JE C32. KW Comovement. Unobserved Factors. Common Trends.
AB This paper analyzes the inter-relationship of outputs across sectors. It seeks to identify the size of the persistence and the nature of comovement of six quarterly individual series for the period 1970:1-1991:4. Moreover the paper investigates whether the unobserved factors governing output and employment fluctuations across sectors of the economy have an evolution over time characterized as a transitory or long-lasting process. The paper discusses the implications of the main findings.

Chichilnisky, Graciela

PD October 1993. TI Markets, Arbitrage and Social Choices. AA Columbia University. SR Universite Catholique de Louvain CORE Discussion Paper: 9342; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 73. PR not available. JE D51, D71. KW Limited Arbitrage. Social Choice Theory.
AB The paper establishes a clear connection between equilibrium theory and social choice theory by showing that, for a well defined social choice problem, the conditions which are necessary and sufficient to solve this problem are the same as the conditions which are necessary and sufficient to establish existence of a competitive equilibrium. We define a condition of limited arbitrage on the preferences and the endowments of an Arrow-Debreu economy. This bounds the utility gains that the traders can afford from their initial endowments. Theorem 2 proves that limited arbitrage is necessary and sufficient for the existence of a social choice rule which allocates society's resources among individuals in a manner which depends continuously and anonymously on their preferences over allocations, and which respects unanimity. Limited arbitrage is also necessary and sufficient for the existence of a competitive equilibrium in the Arrow-Debreu economy, with or without bounds on short sales.

Chilton, John B.

PD August 1993. TI Voluntary Notice. AU Chilton, John B.; Addison, John T. AA Chilton: University of South Carolina. Addison: University of South Carolina and University of Southampton. SR University of Southampton Discussion Paper in Economics and Econometrics: 9312; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. PG 23. PR no charge. JE J41, J65, J68. KW Advance Notice. Efficient Notice Contracts. Severance Pay.
AB This paper is founded on the premise that firms can choose binding-if not self-enforcing- contracts promising workers prenotification of any impending job loss. It then examines the nature of the equilibrium contracts under voluntary exchange. In the model the firm's option of not committing to give advance notice substitutes for the limits placed on commitments on the part of the workers arising from legal prohibitions on indentured servitude. Voluntary exchange may result in an inefficient contract, but legislation mandating notice can not on first-best grounds yield efficiency gains though it is likely to be redistributive. Moreover, a notice mandate can create inefficiency, via the substitution of inefficient notice contracts for efficient no-notice contracts. Curiously, a no-notice or reverse mandate may enhance efficiency and benefit workers. A second-best case for mandated notice is offered in the case of imperfectly experience-rated unemployment insurance.

Christensen, Bent Jesper

PD October 1993. TI Local Cuts and Separate Inference. AU Christensen, Bent Jesper; Kiefer, Nicholas M. AA Christensen: New York University. Kiefer: Cornell University. SR New York University Salomon Brothers Working Paper: S-93-56; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. PG 21. PR not available. JE C51. KW Likelihood. Cointegration. Asset Pricing.
AB The new concept of a local cut is shown to lead to natural separate inference in cases where no formal statistical justification for such procedures exists using conventional concepts. Examples include the panel data model with fixed effects, the capital asset pricing model, the cointegration model and the prototypal job search model. An interpretation of local cuts in sufficiently smooth settings in terms of the familiar Edgeworth expansion is provided.

PD not available. TI Efficiency Gains in Beta-Pricing Models. AA New York University and Cornell University. SR New York University Salomon Brothers Working Paper: S-93-57; 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 12. PR not available. JE C13. KW Factor Analysis. Risk Premium. Efficiency Gain.
AB Recent literature shows that the risk premium is efficiently estimated in the usual two-pass procedure, estimating betas in the unrestricted model and then regressing returns on estimated betas. This paper shows that this is not so when allowing for factor unobservability. Imposing the financial theory restriction from the outset leads to a strictly positive efficiency gain in the risk premium estimation. In addition, the role of an associated efficiency gain in the beta estimation is studied in the context of a zero- beta model.

Citanna, Alessandro

TI Pareto Improving Financial Innovation in Incomplete Markets. AU Cass, David; Citanna, Alessandro.

Claessens, Stijn

TI Forecasting Volatility in Commodity Markets. AU Kroner, Kenneth F.; Kneafsey, Kevin P.; Claessens, Stijn.

PD December 1993. TI The Effect of Equity Barriers on Foreign Investment in Developing Countries. AU Claessens, Stijn; Rhee, Moon-Whoan. AA Claessens: The World Bank. Rhee: KyungHee University. SR National Bureau of Economic Research Working Paper: 4579; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 25. PR $5.00. JE G12, G15, G18. KW Stock Performance. Foreign Investment. Investment.
AB This paper investigates stock performance in emerging markets in relation to their accessibility by foreign investors (as measured by investability index of the IFC). Using the Stehle (1977) model, we reject for most markets integration and fail to reject for all segmentation. We find that there is a positive relationship between a stock's P/E-ratio and its investability index for most emerging markets, suggesting that barriers to access by foreigners have a negative impact. For four markets, this result is robust to the inclusion of the world beta and the degree of international spanning of the domestic market. A significant negative relationship between the investability index and stock return is only found for Jordan. This is likely because the effects of changes in the degree of access over time confound the cross-sectional relationship between return and investability indexes.

Clark, William C.

TI Sustainable Development as Social Learning: Theoretical Perspectives and Practical Challenges for the Design of a Research Program. AU Parson, Edward A.; Clark, William C.

Coe, David T.

PD November 1993. TI International R&D Spillovers. AU Coe, David T.; Helpman, Elhanan. AA International Monetary Fund. SR International Monetary Fund Working Paper: 93/84; International Monetary Fund, Washington, DC 20431. PG 20. PR not available. JE O31, O40. KW Research and Development. International Spillovers.
AB A model is presented based on recent theories of economic growth that treat commercially oriented innovation efforts as a major engine of technological progress. We study the extent to which a country's total factor productivity depends on domestic and foreign R&D capital stocks, both proxied by cumulative R&D expenditures. We estimate our equations on a pooled data set of 22 countries during 1970-90 and interpret our results as pooled cointegrating equations. While the beneficial effects on TFP from domestic R&D is well established, we find that foreign R&D is also important. Our estimates suggest that foreign R&D has a stronger effect on domestic productivity the more open an economy is to foreign trade, and that the rate of return on R&D capital stocks is very high, both in terms of domestic output and in terms of international spillovers.

Coleman, James S.

TI Trade Blocs and Multilateral Free Trade. AU Lal, Deepak; Coleman, James S.

TI Participation, Markets and Democracy. AU Lal, Deepak; Coleman, James S.

TI India and China: Contrasts in Economic Liberalization? AU Lal, Deepak; Coleman, James S.

TI Poverty and Development. AU Lal, Deepak; Coleman, James S.

Conn, David

TI An Experimental Study of Cost-Sharing Contracts for Procurement: Market Performance Results. AU Cech, Paula-Ann; Cox, James C.; Isaac, R. Mark; Conn, David.

Constantino, Miguel

PD October 1993. TI A Cutting Plane Approach to Capacitated Lot-Sizing with Start-up Costs. AA University Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9338; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 34. PR not available. JE C44. KW Mixed Integer Model. Production Planning. Machine Capacity.
AB We consider a mixed integer model for multi-item single machine production planning, incorporating both start-up costs and machine capacity. The single item version of this model is studied from the polyhedral point of view and several families of valid inequalities are derived. For some special classes of inequalities, we give necessary and sufficient facet inducing conditions, and efficient separation of algorithms. We use these inequalities in a cutting plane/branch and bound procedure. A set of real life based problems with 5 items and up to 36 periods is solved to optimality.

Cooper, Russell W.

TI Entry and Exit, Product Variety and the Business Cycle. AU Chatterjee, Satyajit; Cooper, Russell W.

PD December 1993. TI Evidence on Macroeconomic Complementarities. AU Cooper, Russell W.; Haltiwanger, John. AA Cooper: Boston University and National Bureau of Economic Research. Haltiwanger: University of Maryland and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4577; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR $5.00. JE D40, D43, E20, E32. KW Strategic Complementarities. Macroeconomic Complementarities. Economic Fluctuations.
AB This paper provides empirical evidence on macroeconomic complementarities, a restriction on the nature of interaction between individuals in a multi-agent setting. These models imply that activities across agents will be positively correlated, that discrete decisions will be synchronized and that disturbances will be magnified and propagated. The paper shows that these implications are consistent with aggregate observations as well as some microeconomic evidence. Further, looking at certain historical episodes, such as the NIRA, as well as seasonal fluctuations provides additional support for models with macroeconomic complementarities.

TI Entry and Exit, Product Variety and the Business Cycle. AU Chatterjee, Satyajit; Cooper, Russell W.

Cordella, Tito

AB Domestic transfers such that all individuals gain in utility with international trade, compared to domestic autarky, need not exist.

AB Strategic trade policy affects foreign-based firm's internationalization mode. In this paper, by endogenizing market structure and tariff policy, we claim that "tariff jumping" is not enough to give a rationale to the existence of multinational enterprises, in absence of cost differentials and "exportation costs" other than tariffs. Despite this first negative result, we show that the study of the strategic interaction between firms and policy-makers, even in such a simple framework, sheds some light on the relationship between national welfare and MNE's competitive advantages.

Corden, W. Max

Cox, James C.

AB Two models are developed for an economic approach to accuracy in journalism. One model focuses on the role editors play in establishing accuracy standards in journalism when readers cannot know individual reporters by their reputations for accuracy. Conditions are identified under which editors can cause low-and-high-accuracy reporters to self-select in a separating equilibrium of a two-tier journalistic market. The second model focuses on the relationship between a source and a reporter when the source can read the story and learn whether it is relatively favorable or unfavorable to his interests but cannot learn whether the favorable or unfavorable content resulted from the reporters choices or from decisions made by the editor, publisher, or some other actor. A condition is identified under which there exists a system of rewards that would make it possible for the source to control the reporter's choice of action.

Cremer, Helmuth

AB This paper develops a model of inter vivos gifts and bequests in a setting of moral hazard and adverse selection. Altruistic parents do not perfectly know how much effort their children make to earn their living nor do they know their true level of ability. Inter vivos gifts take place prior to the realization of the children's earnings whereas at the moment of bequests, parents do observe them. We show that an optimal transfer policy generally uses a mix of inter vivos gifts - deemed as more efficient - and bequest - deemed as more redistributive.

Croushore, Dean

AB This paper examines whether the optimal inflation rate is different if we use a shopping-time model of money compared to a model with money in the utility function (MUF). The optimal rate of inflation is the Friedman rule (a nominal interest rate of zero, with inflation such that money and bonds pay the same real return) in first-best analysis with either model. But some authors, using an MUF model, have found that in a second-best analysis in which government must finance its expenditure using distortionary taxation, it is optimal to use the inflation tax. Others argue that in a shopping-time model, the optimal rate of inflation still follows the Friedman rule, and that the MUF model is inadequate. This paper shows, following Feenstra's (1986) analysis, that shopping-time models are equivalent to MUF models with the appropriate restrictions. Neither those who claim that Friedman's rule is always optimal, nor those who claim that the optimal inflation rate is always higher than that suggested by Friedman's rule are correct, in a second-best analysis.

Currie, Janet

AB Cash transfers to families with children are increasingly being restricted to parents who work while families of non-working parents are receiving a progressively larger share of their benefits in kind. This paper provides an evaluation of the empirical evidence regarding the effects of in-kind and cash transfer programs on the children who are their intended beneficiaries. A distinction is made between in-kind transfer programs, such as the Food Stamp Program, that provide transfers to families that are earmarked for certain purposes, and programs such as Medicaid that provide specific services directly to children. Although the evidence is incomplete, it suggests that in-kind programs have stronger effects on children than cash transfers, and that programs that target specific benefits directly to children have the largest possible effects.

Dagan, Nir

AB We introduce a game form that captures a non-cooperative dimension of the consistency property of bankruptcy rules. Any consistent and monotone rule is fully characterized by a bilateral principle and consistency. Like the consistency axiom, our game form, together with a bilateral principle, yields the corresponding consistent bankruptcy rule as a result of a unique outcome of subgame perfect equilibria. The result holds for a large class of consistent and monotone rules, including the Constrained Equal Award, the Proportional and many other well-known rules. Moreover, for a large class of rules, all the subgame perfect equilibria are coalition-proof.

David, Alexander

AB The drift of two different diffusion processes (asset returns) is determined by a state variable which can take on two values. It jumps between the two according to Poisson increments (this is called a "regime-switch"). For any given position of the state variable the drift of one process is high and the other is low. I find that the posterior probability that the first asset has higher average returns, conditional on observing the path (returns) of each process, follows a diffusion process and calculate its infinitesimal parameters. I also derive analytical expressions for its stationary density and for some of its path properties. I compare the filtering problem to the Kalman Filtering problem and find that even though the dynamics of the mean of the distribution are very similar, the dynamics of the variance are subject to stochastic fluctuations. The model is parsimonious in that the conditional mean and variance are functions of a single variable. I characterize the interest-rate and total-returns processes in a Cox-Ingersoll-Ross (1985) style model where the productivities of assets are unobserved, but inferred as above. I find that this model is capable of reproducing three stylized facts of stock-market returns and interest-rates. These are the skewness and kurtosis of returns and the "Predictive-Asymmetry" of returns: excess-returns and future changes in volatility are negatively correlated. Further negative returns cause reactions of larger magnitude. The success of the model in generating these features depends on the speed of learning about the regime switches. parameter values which lead to faster learning, are consistent with large negative skewness of returns and the Predictive Asymmetry property. The slower learning version leads to greater kurtosis of returns. I show that a model based on the same fundamentals but with observed "regime-shifts" is not reconcilable with these features. My analysis suggests that learning about the productivities of assets of the kind introduced here may be an important determinant of portfolio choices and observed asset returns.

Dawar, N.

AB The central thesis of this paper is that knowledge generation for new domains takes place through a process of metaphorical mapping of existing theories onto referents in the new domain. The importance of Metaphor as an epistemological process in consumer research is examined. An account of the metaphor construction process is developed. Implications for consumer research are drawn. The concept of metaphor as a theory construction process is applied to specific cases in consumer behavior theory. Directions for future research are suggested.

de Meza, David

Dhillon, Amrita

Catholique de Louvain CORE Discussion Paper: 9348; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 49. **PR** not available. **JE** D81, D71. **KW** Social Welfare Function. Lotteries.
AB In a framework of preferences over lotteries, we show that an axiom system consisting of weakened versions of Arrow's axioms has a unique solution. "Relative Utilitarianism" consists of first normalizing individual von Neumann-Morgenstern utilities between 0 and 1 and then summing them.

Dias Proenca, Isabel M.
TI A Bootstrap Test for Single Index Models. **AU** Hardle, Wolfgang; Dias Proenca, Isabel M.

Dominguez, Kathryn M.
PD November 1993. **TI** Does Central Bank Intervention Increase the Volatility of Foreign Exchange Rates? **AA** Harvard University. **SR** Harvard John F. Kennedy School of Government Discussion Paper: R94-2; John F. Kennedy School of Government, 79 John F. Kennedy Street, Cambridge, MA 02138. **PG** 21. **PR** no charge. **JE** F31, E58. **KW** Exchange Rates. ARCH. Exchange Rate Volatility.
AB Since the abandonment of the Bretton Woods system of fixed exchange rates in the early 1970's, exchange rates have displayed a surprisingly high degree of time-conditional volatility. This volatility can be explained statistically using autoregressive conditional heteroskedasticity models, but there remains the question of the economic source of this volatility. Central bank intervention policy may provide part of the explanation. Previous work has shown that central banks have relied heavily on intervention policy to influence the levels of exchange rates, and that these operations have, at times, been effective. This paper investigates whether central bank interventions have also influenced the variance of exchange rates. The results from daily and weekly GARCH models of the $/DM and $/Yen rates indicate that publicly known Fed intervention generally decreased volatility over the full period. Secret intervention operations by both the Fed and the Bundesbank generally increased exchange rate volatility over the period.

Doyle, Chris
PD November 1992. **TI** Privatisation and the Development of Industrial Enterprises in Russia. **AU** Doyle, Chris; Krasnoselsky, Alexander. **AA** Doyle: University of Cambridge. Krasnoselsky: Institute of Economic Policy, Moscow. **SR** University of Cambridge Discussion Papers on Economic Transition: DPET 9308; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 13. **PR** $5.00 (L2.50); checks payable to University of Cambridge. **JE** L33, L52, O12, P11, P52. **KW** Privatization. Economic Transition.
AB The paper addresses the changing position facing industrial enterprises in the Russian Federation. It examines how the piecemeal reforms of the late 1980's shaped the environment for the mass privatization program being launched in Russia at the moment. The components of the privatization program are considered and their merits and weaknesses outlined, and also an assessment is made as to whether the program and proposed program provide encouragement for

entrepreneurs. Some detail is given about the role of foreign investors and the difficulties they face. It is argued that the scope, scale and complexity of the program are all adding to the difficulties being experienced by the present government.

PD May 1993. **TI** Microeconomic Reform and Transition in Russia: Price Liberalisation. **AU** Doyle, Chris; Krasnoselsky, Alexander. **AA** Doyle: University of Cambridge. Krasnoselsky: Institute of Economic Policy, Moscow. **SR** University of Cambridge Discussion Papers on Economic Transition: DPET 9309; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 20. **PR** $5.00 (L2.50); checks payable to University of Cambridge. **JE** E63, E64, E65, P22, D30. **KW**
AB The paper considers the impact of price liberalization on the Russian microeconomy over the first few months of 1992. The aim of the policy was to stimulate supply incentives but it was implemented at a time when short run stabilization objectives predominated. Price liberalization had a dramatic impact on income distribution and we present estimates showing how the distribution widened. Supply responses were favorable for perishable goods and queues were eliminated within weeks, but the supply of durable goods responded less favorably. The policy of establishing more meaningful relative prices, however, was undermined by an accommodating monetary regime.

Dreze, Jacques H.
PD October 1993. **TI** Regions of Europe: A Feasible Status, to Be Discussed. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9337; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 31. **PR** not available. **JE** H11, F02, H80. **KW** European Community. Secession.
AB A new concept is proposed, that of "Regions of Europe", which do not have full statehood and belong not to any state but to the Community directly. Without endorsing this possibility, and limiting itself to its economic aspects, this article investigates in particular how assets and liabilities should be apportioned at the time of a secession. It argues in favor of distributive neutrality: net incomes are unchanged by the secession itself, in both the seceding region and the rest of the nation. How distributive neutrality could be implemented is explored through a number of suggestive examples. In general, a region receives a share of the public debt related to its share of the public primary deficit, with corrections to account for growth, unsustainability of the public debt, and so on.

PD November 1993. **TI** The Formulation of Uncertainty: Prices and States. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9347; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 16. **PR** not available. **JE** D81, D51, D52. **KW** General Equilibrium. Incomplete Markets.
AB The formulation of uncertainty in terms of exogenous states has been extremely fruitful. The paper discusses informally the question whether that formulation calls for including the spot prices prevailing at a future date-event in the definition of the event itself. The discussion also bears on the comparison between the theories of temporary general equilibrium (TGE) and general equilibrium with incomplete

markets (GEI). The following conclusions emerge: (i) The conceptual device of defining states comprehensively enough that market clearing prices are uniquely defined is consistent and useful, provided one recognizes that many events are then unobservable. (ii) How one models the residual uncertainty associated with unobservable events does not seem to matter much. (iii) Greater realism is obtained when it is recognized that prices are not observed perfectly, that different agents have different information, and that prices convey information. (iv) The revision of expectations on the basis of price observations is an essential feature in market economies.

Droge, Bernd
TI Model Selection and Variable Transformations in Nonlinear Regression. AU Bunke, Olaf; Droge, Bernd; Polzehl, Jorg.

Dutta, Jayasri
PD June 1993. TI Learning by Observation Within the Firm. AU Dutta, Jayasri; Prasad, Kislaya. AA Dutta: Universite Catholique de Louvain and University of Cambridge. Prasad: Florida State University. SR Universite Catholique de Louvain CORE Discussion Paper: 9326; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. PG 33. PR not available. JE D83, J20, D20. KW Learning. Productivity. Wage Profiles.
AB This paper studies the effects of learning by observation on the production and wage decisions of a firm. Workers can improve their productivity by observing others within the firm. The firm chooses a wage profile which determines the amount of research done within the firm. Some workers may choose to free ride on the research of others. We examine whether the firm will have increasing returns to scale in production. It turns out that the production function either satisfies the efficiency wage hypothesis, or has increasing returns to scale. The objectives of the firm determine which of the two regions its production schedule lies in.

PD August 1993. TI Liquidity and Financial Intermediation. AU Dutta, Jayasri; Kapur, Sandeep. AA Dutta: University of Cambridge. Kapur: Birbeck College. SR Universite Catholique de Louvain CORE Discussion Paper: 9330; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. PG 39. PR not available. JE E43, E44. KW Liquidity Preference. Investment. Financial Intermediation.
AB This paper examines the effect of liquidity preference on investment, output, and prices in competitive markets, with alternative structures of financial intermediation. The need for liquidity is due to uncertainty in the preferences of individuals. Investment in physical capital is unobservable, and so illiquid. Individuals are willing to carry liquid assets which are dominated in their rate of return. We examine three types of economies: one with money, the second with bonds, and the third with investment banking. Monetary and interest rate policies can have expansionary effects; the qualitative impact of policy interventions differ across asset structures. We also examine the aggregate provision for liquidity, as well as liquidity and term premia at equilibrium.

Eberhart, Allan C.
PD October 1993. TI Noise: The Case of the Market for Bankrupt Firms' Securities. AU Eberhart, Allan C.;
Sweeney, Richard J. AA Eberhart: New York University and Georgetown University. Sweeney: Georgetown University. SR New York University Salomon Brothers Working Paper: S-93-51; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. PG 14. PR not available. JE G33, G12. KW Absolute Priority Rule. Bankruptcy. Security Prices.
AB The well documented phenomena of departures from the absolute priority rule (APR) have provoked an important public policy debate over their consequences. Some scholars argue that APR violations increase economic efficiency because they play an important role in the avoidance of inefficient liquidations and mitigate the risk incentive. Another group argues that APR violations should be abolished because they add greater uncertainty to the security valuation process; that is, they increase noise in security prices. We develop a theoretical model that allows an empirical test of the effect of APR violations on noise; our results suggest that APR violations importantly increase noise. Indeed, at least 30 percent, and as much as 85 percent of the noise in security prices may be attributable to APR violations. This does not suggest that the beneficial effects of APR violations are nonexistent or unimportant, but it does imply that failing to account for the effect of APR violations on noise in any modeling of optimal bankruptcy rules may lead to a suboptimal design.

Edison, Hali J.
PD April 1994. TI Understanding the Empirical Literature on Purchasing Power Parity: The Post-Bretton Woods Era. AU Edison, Hali J.; Gagnon, Joseph E.; Melick, William R. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System International Finance Discussion Paper: 465; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. PG 29. PR no charge. JE C15, F30, F31. KW Monte Carlo. International Finance. Foreign Exchange.
AB This paper argues that the empirical failure of statistical tests of PPP in post-Bretton Woods data is largely due to the low power of the tests employed. This result is demonstrated using Monte Carlo experiments on the size and power of different testing procedures. A new procedure based on Horvath and Watson (1993) has greater power than previous approaches. Using the Horvath-Watson procedure we find moderate evidence in favor of PPP in the post-Bretton Woods era.

Ericsson, Neil R.
PD October 1993. TI Cointegration, Seasonality, Encompassing, and the Demand for Money in the United Kingdom. AU Ericsson, Neil R.; Hendry, David F.; Tran, Hong-Anh. AA Ericsson: Board of Governors of the Federal Reserve System. Hendry: Nuffield College, Oxford. Tran: University of Wisconsin. SR Board of Governors of the Federal Reserve System International Finance Discussion Paper: 457; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. PG 58. PR no charge. JE C10, E41. KW Cointegration. Dynamic Specification. Encompassing. Error Correction. Money Demand.
AB Virtually all previous narrow money demand studies for the United Kingdom have used seasonally adjusted data for

money, prices, and expenditure. This paper develops a constant, data-coherent M1 demand equation for the United Kingdom with seasonally unadjusted data. For that model, we address issues of cointegration, error correction, general-to-specific-modeling, dynamic specification, model evaluation and testing, parameter constancy, and exogeneity. We also establish theoretical and empirical relationships between seasonally adjusted and unadjusted data, and so between models using those data. Finally, we derive and implement encompassing tests for comparing models using adjusted data with models using unadjusted data. Unlike the "standard" encompassing framework, variance dominance is not always a necessary condition for encompassing.

TI Dollarization in Argentina. AU Kamin, Steven B.; Ericsson, Neil R.

Eschweiler, Bernhard
PD November 1993. TI Rules, Discretion, and Central Bank Independence: The German Experience 1880-1989. AU Eschweiler, Bernhard; Bordo, Michael D. AA Eschweiler: J.P. Morgan GmbH, GERMANY. Bordo: Rutgers University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4547; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR $5.00. JE E50, E52, E58. KW Rules versus Discretion. Monetary Authority. Price Stability.
AB Theories of rules and discretion suggest that monetary policy rules are first best in terms of social welfare. However, if commitment is not feasible, delegating monetary policy to an independent and conservative central bank can be second best. Monetary policy in Germany during the past one hundred years provides an excellent case to assess the empirical evidence on the use of rules and central bank independence in monetary policy making. Since the creation of a central monetary authority in 1876, Germany has participated in four monetary regimes: the pre-war gold standard, the interwar gold standard, the Bretton-Woods system, and the floating exchange rate regime. The bottom line of our analysis is that monetary policy in Germany was always geared toward maintaining price stability with the exception of the two world war periods. Germany relied both on rules and discretion with central bank independence to achieve the goal of price stability. A comparison of the Classical Gold Standard regime with the floating exchange rate regime suggests that society under the floating exchange rate regime with central bank independence was better off. However, this comparison ignores the historical difference in output shocks and the possibility that society became more inflation averse over time.

Estrin, Saul
PD May 1992. TI Unnatural Monopoly. AU Estrin, Saul; de Meza, David. AA Estrin: London Business School. de Meza: University of Exeter. SR University of Exeter Department of Economics Discussion Paper: 92/01; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 32. PR no charge. JE L43. KW Statutory Monopoly. Deregulation. Entry. Innovation.
AB Granting a public firm a statutory monopoly is welfare enhancing if its survival is assured without it. A necessary but not sufficient condition for beneficially repealing a statutory monopoly is that the previously protected firm is eliminated.

Having established these and other results, their robustness in the presence of X-efficiency and product innovation effects is investigated by numerical methods.

Fairburn, James A.
PD September 1993. TI Rewarding Performance by Promotion to a Different Job. AU Fairburn, James A.; Malcomson, James M. AA Fairburn: University of Sussex. Malcomson: University of Southampton. SR University of Southampton Discussion Paper in Economics and Econometrics: 9316; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. PG 10. PR no charge. JE D82, J41, J30, J33. KW Tournaments. Incentives. Influence Activity.
AB Use of promotions rather than performance-related pay to provide incentives can be justified if performance is non-verifiable information. This does not explain why promotion is to a different job rather than simply a better paid job. The effectiveness of tournaments is undermined, however, if unsuccessful workers are equally suited to higher paid jobs and can engage in bribery or other influence activity. A promotion-based reward structure with pay tied to jobs can be made immune to such activity if misallocations of employees to jobs are costly to the firm.

Fan, Jean
PD July 1992. TI Evidence of Medium Cycles in U.S. Data. AA University of Exeter. SR University of Exeter Department of Economics Discussion Paper: 93/02; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 30. PR no charge. JE C32, E32. KW Frequency Domain. Medium Cycles.
AB The 122-year annual GNP, 60-year annual data and postwar quarterly data covering six U.S. macroeconomic variables are examined in frequency domain. Different methods of detrending are used to make data stationary before spectral analysis is undertaken. Strong evidence of the 7- to 10-year medium cycles and their relative importance over the 3- to 5-year cycles are found in all data sets under study. The medium cycles are then isolated by the band-pass filter, and their stylized facts are also reported. These results raise doubts about the existing real business cycle models which is unable to explain these medium cycles.

PD July 1993. TI What Has Been Discarded? An Alternative Approach to Cycle and Growth. AA University of Exeter. SR University of Exeter Department of Economics Discussion Paper: 93/03; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG 30. PR no charge. JE O41, E32. KW New Technology. R&D Technology. Business Cycle Duration. Economic Growth.
AB How do growth and cycles interact? A modified endogenous growth model is used to explain business cycles over different frequencies, especially the lower frequency components, on the balanced growth path. A new variable-R&D time period-broadens the concept of the intertemporal substitution and determines the durations of longer cycles. The evolution of technology is separated from short-run shocks. A severe recession can be caused by a positive but lower growth rate of technology in the near future, and vice versa. Model calibrations are considered in both frequency and time domains. The results capture the major feature of power spectra

in U.S. data.

Faust, Jon

PD March 1994. **TI** When Do Long-Run Identifying Restrictions Give Reliable Results? **AU** Faust, Jon; Leeper, Eric M. **AA** Faust: Board of Governors of the Federal Reserve System. Leeper: Federal Reserve Bank of Atlanta. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 462; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 37. **PR** no charge. **JE** C32. **KW** Vector Autoregression. Identification. Long-Run Restriction.

AB Many recent papers have tried to identify behavioral disturbances in vector autoregressions (VAR's) by imposing restrictions on the long-run effects of shocks. This paper argues that this approach will support reliable structural inferences only if the underlying economy satisfies strong restrictions. Absent restrictions linking long-run and short-run dynamics, every decomposition of a VAR is essentially equally consistent with any long-run restriction. Further, dynamic common factor restrictions must hold if the scheme is to work properly in small models estimated using time-aggregated data. The paper illustrates possible consequences of failure of these assumptions using bivariate models to identify aggregate supply and demand disturbances.

Feenstra, Robert C.

PD November 1993. **TI** Market Structure and International Trade: Business Groups in East Asia. **AU** Feenstra, Robert C.; Yang, Tzu-Han; Hamilton, Gary G. **AA** Feenstra: University of California, Davis and National Bureau of Economic Research. Yang: Council for Economic Planning and Development, Taiwan. Hamilton: University of California, Davis and University of Washington. **SR** University of California at Davis Economics Department Working Paper: 93-23; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 27. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** L16, F12, F14, O53. **KW** Scale Economies. Product Variety. Business Group.

AB In this paper we study the effect of market structure on the trade performance of South Korea, Taiwan, and Japan. We center our analysis on Korea and Taiwan, countries which have very different market structures: Korea has many large, vertically-integrated business groups known as chaebol, whereas business groups in Taiwan are smaller and horizontally- integrated in the production of intermediate inputs. The exports of these countries to the United States are compared using indexes of product variety and "product mix", which are constructed at the 5-digit industry level. It is found that Taiwan tends to export a greater variety of products to the U.S. than Korea, and this holds across nearly all industries. In addition, Taiwan exports relatively more high-priced intermediate inputs, whereas Korea exports relatively more high-priced final goods. We argue that these results confirm the importance of market structure as a determinant of trade patterns.

Feinstein, Jonathan S.

PD December 1993. **TI** Elderly Health, Housing, and Mobility. **AA** Yale University. **SR** National Bureau of Economic Research Working Paper: 4572; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge,

MA 02138. **PG** 32. **PR** $5.00. **JE** J14, I10. **KW** Elderly. Health. Housing. Mobility.

AB I construct dynamic economic models which focus on an elderly person's decision whether to move in response to changes in his or her health status. The models specify three health states (good, moderately disabled, and poor), three matching housing states (conventional, transitional, and institutional), and explicitly include several different kinds of mobility costs, including the direct utility costs, the indirect health effects of mobility, and, in the more complex model, financial transaction costs. The first model I present examines elderly mobility in a simple environment in which utility depends only on the match between housing and health, and a bequest. The second model extends the first to incorporate housing prices, household wealth, and elderly consumption decisions. Extensive simulations of the two models show that both predict considerable mobility, even when mobility costs are large. The results also highlight the importance of transitional housing, and provide evidence on the relationship between housing, mobility, household wealth, and consumption.

Feldman, Penny H.

PD October 1993. **TI** Labor Market Issues in Home Care. **AA** Harvard University. **SR** Harvard John F. Kennedy School of Government Discussion Paper: R94-3; John F. Kennedy School of Government, 79 John F. Kennedy Street, Cambridge, MA 02138. **PG** 31. **PR** no charge. **JE** I11, I18, J40. **KW** Home Health Industry. Regulation.

AB The home health industry's diverse constituencies have been preoccupied with two main questions: 1) will the home care industry be able to attract sufficient labor to meet the projected demand for service, and 2) will the work force employed by the industry have the capacity to deliver high quality services? This paper addresses these questions by reviewing what is known about the linkages among quality of work life, labor supply, and cost of home health care. The paper draws three main conclusions: 1) despite heavy reliance on government funds and significant government regulation, the industry has shown some capacity over the last few years to respond effectively to labor shortages; 2) the industry's future adaptability will be heavily dependent on the relative generosity of government benefit and payment policies and on the incentives embodied in them; 3) to avert recurrent or persistent labor shortages, those policies should allow employers significant flexibility to determine the compensation package, the skill mix and the deployment of their work force.

Fernald, John G.

TI Are Apparent Productive Spillovers a Figment of Specification Error? **AU** Basu, Susanto; Fernald, John G.

Ferson, Wayne E.

PD December 1993. **TI** An Exploratory Investigation of the Fundamental Determinants of National Equity Market Returns. **AU** Ferson, Wayne E.; Harvey, Campbell R. **AA** Ferson: University of Washington. Harvey: Duke University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4595; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $5.00. **JE** G10, G12, G10. **KW** Expected Returns. Equity Markets. Conditional Betas.

AB This paper studies average and conditional expected returns in national equity markets, and their relation to a number of fundamental country attributes. The attributes are organized into three groups. The first is relative valuation ratios, such as price-to-book-value, cash-flow, earnings and dividends. The second group measures relative economic performance and the third measures industry structure. We find that average returns across countries are related to the volatility of their price-to-book ratios. Predictable variation in returns is also related to relative gross domestic product, interest rate levels and dividend-price ratios. We explore the hypothesis that cross-sectional variation in the country attributes proxy for variation in the sensitivity of national markets to a global measures of economic risks. We test single-factor and two-factor models in which countries' conditional betas are assumed to be functions of the more important fundamental attributes.

Fischer, Stanley

AB Using a regression analog of growth accounting, I present cross-sectional and panel regressions showing that growth is negatively associated with inflation, large budget deficits, and distorted foreign exchange markets. Supplementary evidence suggests that the causation runs from macroeconomic policy to growth. The framework makes it possible to identify the channels of these effects: inflation reduces growth by reducing investment and productivity growth; budget deficits also reduce both capital accumulation and productivity growth. Examination of exceptional cases shows that while low inflation and small deficits are not necessary for high growth even over long periods, high inflation is not consistent with *sustained growth*.

Fisher, Anthony

AB The question addressed by this study is how a large urban water district can best respond to a drought. Using a computer model of a representative district, we find that a combination of conjunctive use and water marketing is well over an order of magnitude cheaper than the traditional alternative of construction of new storage capacity. The indicated cost saving can be explained by the intermittent nature of the transfer, corresponding to the intermittent demand. Comparing costs to benefits, the averted consumer surplus loss otherwise entailed by raising prices to cut back on consumption in the event of a drought, we find that construction of new storage does not pass a benefit/cost test, but introduction of conjunctive use/water marketing does.

Fishman, Arthur

AB We analyze the dynamics of a homogeneous-product market in which firms' costs vary over time, consumers buy the product repeatedly, and search costs must be incurred to locate a low-priced seller. The equilibrium price policies of firms exhibit the following features. First, costs shocks that affect individual firms have an aggregate effect on the price level and on the efficiency of market outcomes. In particular, more variable costs give sellers more market power and generate higher prices. Second, when consumers' search costs are different, only some first have a large clientele and large profits while other have a small clientele and small profits, although both types of firms have the same productive efficiency. Furthermore, the pricing policy of large firms exhibits price rigidity. These features generate a demand-based explanation of the cross-sectional correlation between profits and firm size, of the persistence of profits, and of the role of consumers' immobility in determining firms' profits.

Flores, Nicholas E.

Forges, Francoise

AB A mechanism is posterior efficient in a differential information economy if at every outcome selected by the mechanism, the agents' expected utilities given this outcome cannot be Pareto improved by any feasible mechanism (in the revised economy). We show that a non-revealing (resp. completely revealing) mechanism is posterior efficient if and only if it is incentive interim efficient (resp. ex post efficient). The various efficiency concepts are illustrated in a simple adverse selection model.

Frank, Andras

DEUTSCHLAND. **PG** 37. **PR** no charge. **JE** C44. **KW** Graph Theory. Combinatorial Optimization.
AB Submodular functions and related polyhedra play an increasing role in combinatorial optimization. The present survey-type paper is intended to provide a brief account of this theory along with several applications in graph theory.

Frankel, Jeffrey A.

PD December 1993. **TI** Continental Trading Blocs: Are they Natural, or Super-Natural? **AU** Frankel, Jeffrey A.; Stein, Ernesto.; Wei, Shang-Jin. **AA** Frankel: University of California, Berkeley and National Bureau of Economic Research. Stein: University of California, Berkeley. Wei: Harvard University. **SR** National Bureau of Economic Research Working Paper: 4588; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** $5.00. **JE** F10, F11, F12, R40. **KW** Gravity Model. Trading Blocs. Transport Costs.
AB Using the gravity model, we find evidence of three continental trading blocs: the Americas, Europe and Pacific Asia. Intra-regional trade exceeds what can be explained by the proximity of a pair of countries, their sizes and GNP/capitas, and whether they share a common border or language. We then turn from the econometrics to the economic welfare implications. Krugman has supplied an argument against a three-bloc world, assuming no transport costs, and another argument in favor, assuming prohibitively high transportation costs between continents. We complete the model for the realistic case where intercontinental transport costs are neither prohibitive nor zero. If transport costs are low, continental Free Trade Areas can reduce welfare. We call such blocs super-natural. Partial liberalization is better than full liberalization within regional Preferential Trading Arrangements, despite the GATT's Article 24. The super-natural zone occurs when the regionalization of trade policy exceeds what is justified by natural factors. Estimates suggest that trading blocs like the current EC are super-natural.

PD December 1993. **TI** The Internationalization of Equity Markets. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4590; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** G10, G15. **KW** International Asset Markets. Equity Markets.
AB This introduction to a forthcoming NBER volume on "The Internationalization of Equity Markets" argues that the existing finance literature has in some respects not kept pace with world trends. Most empirical studies fail to take due account of the diversity of assets offered by countries around the world, the diversity of locales in which investors live, and the diversity of institutional peculiarities that characterize the markets in which assets and investors are brought together. Four of the papers in the volume are econometric studies of asset pricing and home-country bias in internationally integrated equity markets. The other four examine such issues as emerging markets, country funds, trading volume, location, taxes, controls, and other imperfections in international markets.

Fries, Steven M.

PD November 1993. **TI** Japanese Banks and the Asset Price "Bubble". **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 93/85;

International Monetary Fund, Washington, DC 20431. **PG** 30. **PR** not available. **JE** G21, G28. **KW** Asset Prices. Bubbles. Banks.
AB With the recent collapse of the asset price "bubble," Japanese banks encountered significant pressure from both a sharp decline in the value of equity holdings and a marked increase in bad loans. In August 1992, the Government initiated measures that stabilized equity prices and assisted banks in managing their nonperforming loans. While the major banks disclosed that 4.6 percent of their total loans were nonperforming at the end of FY 1992, a mechanical estimate of all banks nonperforming and restructured loans is 6-7 percent of their total loans -- a serious yet manageable problem. The main policy implications are to ensure the reasonably prompt resolution of the bad loan problem and to enhance market discipline to prevent its recurrence.

Froot, Kenneth A.

TI International Experiences with Securities Transaction Taxes. **AU** Campbell, John Y.; Froot, Kenneth A.

Fry, Jane M.

TI A Simple Nested Test of AIDS. **AU** McLaren, Keith R.; Fry, Jane M.; Fry, Tim R. L.

Fry, Tim R. L.

PD September 1993. **TI** A Monte Carlo Study of Tests for the Independence of Irrelevant Alternatives Property. **AU** Fry, Tim R. L.; Harris, Mark N. **AA** Monash University. **SR** Monash Department of Econometrics Research Working Paper: 8/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 17. **PR** no charge. **JE** C25, C15, C12. **KW** Logit Models. Discrete Choice.
AB A plethora of tests for the Independence of Irrelevant Alternatives (IIA) property of Logit models of discrete choice behavior has been proposed in the literature. These tests are based upon asymptotic arguments and little is known about their size and power properties in finite samples. This paper uses a Monte Carlo simulation study to investigate the size and power properties of six tests for IIA in the Multinomial Logit (MNL) model. Our results show that tests based upon partitioning the choice set appear to have very poor size and power properties in small samples.

TI A Simple Nested Test of AIDS. **AU** McLaren, Keith R.; Fry, Jane M.; Fry, Tim R. L.

TI Maximum Likelihood Estimation in Binary Data Models Using Panel Data Under Alternative Distributional Assumptions. **AU** Orme, Chris; Fry, Tim R. L.

Fullerton, David

TI Alternatives for Managing Drought: A Comparative Cost Analysis. **AU** Fisher, Anthony; Fullerton, David; Hatch, Nile; Reinelt, Peter.

Fullerton, Don

PD December 1993. **TI** Tax Evasion and the Allocation of Capital. **AU** Fullerton, Don; Karayannis, Marios. **AA** Fullerton: Carnegie Mellon University and National Bureau of Economic Research. Karayannis: Price Waterhouse. **SR** National Bureau of Economic Research Working Paper: 4581; National Bureau of Economic Research, 1050

Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** $5.00. **JE** H20, H24, H26. **KW** Taxes. Noncorporate Sector. Tax Compliance.
AB The efficiency cost of capital misallocations between the corporate sector and the noncorporate sector is typically measured using statutory tax differences. Corporate-source income tax compliance is high because of third party reporting, however, noncorporate rental income tax compliance is low. Differential evasion thus exacerbates statutory differences and enlarges the efficiency cost. To measure this effect, we build a numerical general equilibrium model where households simultaneously choose portfolios of risky assets and fractions of income to report.

Gaba, A.

PD November 1993. **TI** The Impact of Testing Errors on Value of Information: A Quality-Control Example. **AU** Gaba, A.; Winkler, R. L. **AA** Gaba: INSEAD. Winkler: Duke University. **SR** INSEAD Working Papers: 93/84/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 8. **PR** not available. **JE** D81, D83. **KW** Errors in Data. Quality Control. Decision Making.
AB In this paper, we extend recent work on the inferential impact of errors in data to a decision-making setting. In the context of a simple quality- control example, we illustrate how errors can cause substantial reductions in the value of information from a sample and uncertainty about error rates can lead to yet further reductions in EVSI. Moreover, we extend the notion of an equivalent error-free sample size (which indicates the reduction in effective sample size due to errors from an inferential framework to a decision-making framework and find that as uncertainty about error-rate parameters increases, reductions in effective sample size are even greater for a decision maker than the inferential measures suggest.

Gagnon, Joseph E.

TI Understanding the Empirical Literature on Purchasing Power Parity: The Post-Bretton Woods Era. **AU** Edison, Hali J.; Gagnon, Joseph E.; Melick, William R.

Galor, Oded

PD November 1993. **TI** The Gender Gap, Fertility, and Growth. **AU** Galor, Oded; Weil, David N. **AA** Galor: Brown University. Weil: Brown University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4550; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $5.00. **JE** J13, J16, O40, O15. **KW** Fertility. Growth. Development. Wage Inequality.
AB This paper examines a novel mechanism linking fertility and growth. Household fertility is determined by relative wages of women and men. Increasing women's wages reduces fertility by raising the cost of children relatively more than household income. Lower fertility raises the level of capital per worker which in turn, since capital is more complementary to women's labor input than men's, raises women's relative wages. This positive feedback leads to the possibility of multiple steady-state equilibria. Countries with low initial capital may converge to a development trap with high fertility, low capital, and low relative wages for women.

PD January 1994. **TI** Human Capital Distribution, Technological Progress, and Economic Growth. **AU** Galor,

Oded; Tsiddon, Daniel. **AA** Galor: Brown University. Tsiddon: Hebrew University of Jerusalem and Center for Economic Policy Research. **SR** Brown University Department of Economics Working Paper: 94-2; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 43. **PR** no charge. **JE** D31, O40. **KW** Income Distribution. Overlapping Generations.
AB This paper analyzes the interaction between the distribution of human capital, technological progress, and economic growth. The study demonstrates the significant role of the distribution of human capital in the process of economic development. The evolutionary pattern of the human capital distribution, the income distribution and economic growth is determined by the interplay between a local home environment externality and a global technological externality. In periods in which the home environment externality is the dominating factor, the distribution of human capital becomes polarized, whereas in periods in which the global technological externality dominates, convergence ultimately takes place. The theory provides several broad testable implications two of which are: (a) the distribution of human capital is a significant explanatory variable of economic growth, and (b) the observed relationship between the income distribution and economic growth is governed by the relationship between the distribution of human capital and economic growth.

Gardiner, Karen

TI Comparing Low Incomes in France and the United Kingdom: Evidence From Household Expenditure Surveys. **AU** Atkinson, A. B.; Gardiner, Karen; Lechene, Valerie; Sutherland, Holly.

Garoyan, Leon

TI Dimensions of the Global Processing Tomato Industry. **AU** Moulton, Kirby; Garoyan, Leon; Hetland, Norman.

Geanakoplos, John

PD August 1993. **TI** Common Knowledge. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1062; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 70. **PR** no charge. **JE** C70, D83, D84. **KW** Approximate Common Knowledge. Speculation. Betting.
AB This paper surveys the implications of "common knowledge" in interactive epistemology and game theory, with special emphasis on speculation, betting, agreeing to disagree, and coordination. The implications of approximate common knowledge are also analyzed. Approximate common knowledge is defined three ways: as knowledge of knowledge...of knowledge, iterated N times; as p-common knowledge; and as weak p-common knowledge. Finally the implications of common knowledge are examined when agents are boundedly rational.

Ghose, Devajyoti

PD June 1993. **TI** The Relationship Between GARCH and Stable Processes: Finding the Source of Fat Tails in Financial Data. **AU** Ghose, Devajyoti; Kroner, Kenneth F. **AA** University of Arizona. **SR** University of Arizona Economics Working Paper: 93-1; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. **PG** 14. **PR** $2 Canada and U.S.; $3 Overseas by air. **JE** C52,

C22. **KW** Stable Paretian Distribution. GARCH. Financial Data.

AB Several studies find the empirical characteristics of financial data to be consistent with stable Paretian distributions, while several other studies find the empirical characteristics to be consistent with GARCH models. In this paper we establish that in situations common in finance, many of the properties of stable models are shared by GARCH models, implying that many of the findings of fat-tailed stable distributions in finance since Mandelbrot (1963) could be caused by temporal clustering of volatility. We also identify some properties that these two models do not have in common, and use these to distinguish between the models. We apply our results to eight financial data series, and conclude that the GARCH model characterizes the data better than the stable Paretian model. This supports the hypothesis that the fat tails in financial data are better described as being caused by volatility clustering than by a stable Paretian data generating process.

Gilby, Elaine M.

PD September 1993. **TI** Panel Data: Controlling for Individual Effects in Models of Learning. **AU** Gilby, Elaine M.; Link, Charles R.; Mulligan, James G. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 93-10; Department of Economics, University of Delaware, Newark, DE 19716. **PG** 18. **PR** not available. **JE** C23, C33, I20, I21. **KW** Panel Data. Education. Learning.

AB Estimation with panel data eliminates the bias introduced in models of learning, either when a pretest score is used as a proxy for student ability and motivation, or when no measure of student ability and motivation is used in a model. The empirical results presented in this paper offer insight into the nature of the bias likely to result from cross-sectional estimation of education learning models. This technique is applicable in studies of the determination of achievement in economics at any level: elementary, secondary, or college. For illustration, this paper uses mathematics achievement data for 2,592 white elementary school students with observations on each student for three consecutive years starting with the fourth grade to demonstrate the usefulness of panel-data analysis for educational production function studies. The main result is that there are important and statistically significant effects from controlling for each student's unobserved characteristics, such as innate ability and motivation. There are important differences between the panel and cross-sectional estimates.

Goldman, Alvin I.

TI Accuracy in Journalism: An Economic Approach. **AU** Cox, James C.; Goldman, Alvin I.

Goulder, Lawrence H.

PD December 1993. **TI** Energy Taxes: Traditional Efficiency Effects and Environmental Implications. **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4582; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** $5.00. **JE** H20, H21, H23. **KW** Tax Policy. Pollution Emissions. Energy Taxes.

AB This paper examines "traditional" (non-environmental) efficiency consequences and environmental effects of two tax policies: a tax on fossil and synthetic fuels based on Btu (or energy) content and a tax on consumer purchases of gasoline. It uses a model that uniquely combines attention to details of the U.S. tax system with a consolidated treatment of U.S. energy use and pollution emissions. On traditional efficiency grounds, each of the energy taxes emerges as more costly to the economy than increases in personal or corporate income taxes of equal revenue yield. Simulation experiments indicate that the excess costs of energy taxes are due partly to their relatively narrow tax base. The Btu tax's application to gross output (as compared with net output under an income tax) serves to expand its excess costs; in contrast, the gasoline tax's focus on consumption (as opposed to income) tends to mitigate its excess costs. On the environmental side, we find that for each of eight major air pollutants considered, energy taxes induce emissions reductions under the income tax alternatives. Overall, this study indicates that the Btu and gasoline taxes are inferior to the alternatives on narrow efficiency grounds but superior on environmental grounds. Whether the environmental attractions of energy taxes are large enough to offset their relatively high non-environmental costs remains an open question.

Gouveia, Miguel

PD October 1993. **TI** Majority Rule and Public Provision of Health Care. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-26; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 32. **PR** no charge. **JE** I18, D71, H51. **KW** Social Choice. Public Health.

AB This paper develops a model of voting over the public provision of health care. Preferences, income, taxes, and the probability of being ill determine the choices of voters. The private use of health care is modeled as a supplement rather than as an exclusive alternative to public health care. This paper shows each agent's induced preferences over public health care levels to be single peaked; thus a majority rule equilibrium exists. The equilibrium is an example of Director's Law of Income Redistribution: voters with very high and low incomes prefer a decrease in public provision levels whereas middle class voters prefer an increase. A ban on private health care activities is shown to be opposed by a majority of voters. Implications of the political equilibrium for the size and distribution of private health care expenditures are drawn. Comparative statistics with respect to shifts in health care costs are presented.

Gouyette, Claudine

TI Regional Convergence in the European Community. **AU** Neven, Damien; Gouyette, Claudine.

Grant, Simon

PD October 1993. **TI** A Cardinal Characterization of the Rubinstein-Safra-Thomson Axiomatic Bargaining Theory. **AU** Grant, Simon; Kajii, Atsushi. **AA** Grant: Australian National University. Kajii: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-18R; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297.

PG 18. PR no charge. JE C78, D81. KW Non-Expected Utility. Bargaining Problem.
AB The purpose of this paper is to demonstrate that the scope of the Rubinstein-Safra-Thomson axiomatic (ordinal) bargaining theory can be extended to a wider family of non-expected utility preferences than considered by RST. Moreover, we show that for this broader class of preferences there is a natural way to translate an ordinal bargaining problem to a cardinal bargaining problem. RST's preference-based axioms for the solution of an ordinal bargaining problem are shown to be equivalent to the original Nash axioms for the corresponding solution of the induced cardinal bargaining problem and hence characterize the ordinal Nash solution for this family of preferences. Although broader, we note that members of this family of preferences cannot accommodate the well-documented violation of expected utility referred to as the common ratio effect.

Grenier, Gilles
TI Language, Employment, and Earnings in the United States: Spanish-English Differentials From 1970 to 1990.
AU Bloom, David E.; Grenier, Gilles.

Griliches, Zvi
TI Econometric Estimates of Prices Indexes for Personal Computers in the 1990's. AU Berndt, Ernst R.; Rappaport, Neal; Griliches, Zvi.

Grilo, Isabel
TI Delegation in a Vertically Differentiated Duopoly. AU Barros, Fatima; Grilo, Isabel.

Grossman, Gene M.
PD December 1993. TI The Politics of Free Trade Agreements. AU Grossman, Gene M.; Helpman, Elhanan. AA Grossman: Princeton University and National Bureau of Economic Research. Helpman: Tel Aviv University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4597; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 43. PR $5.00. JE F10, F11, F13, O10. KW Free Trade. Politics. Government. Bilateral Trading.
AB Suppose that an opportunity arises for two countries to *negotiate a free trade agreement (FTA). Will an FTA between these countries be politically viable? And if so, what form will it take?* We address these questions using a political-economy framework that emphasizes the interaction between industry special interest groups and an incumbent government. We describe the economic conditions necessary for an FTA to be an equilibrium outcome, both for the case when the agreement must cover all bilateral trade and when a few, politically sensitive sectors can be excluded from the agreement.

Grossman, Herschel I.
PD September 1993. TI Population Increase, Extralegal Appropriation, and the End of Colonialism. AU Grossman, Herschel I.; Iyigun, Murat. AA Brown University. SR Brown University Department of Economics Working Paper: 93-39; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 13. PR no charge. JE F02, J22, N37, N35. KW Colonial Period. Subversive Activity. Population Growth.

AB Between 1946 and 1976, the European powers granted independence to all of their large colonies in Africa and Southeast Asia. This paper attempts to provide an economic explanation for this remarkable ending to the era of colonialism. The main theoretical innovation is to consider the effect of population increase on the allocation of time by the indigenous population between productive and subversive activities. The analysis suggests that the increase in population during the colonial period increased the potential return to extralegal appropriation of the profits of colonial companies until the colonies became a net burden on the metropolitan governments. The analysis also suggests that there was less subversive activity in colonies in which the market for indigenous labor was monopsonized because monopsonistic employers internalized the potential negative effect of extralegal appropriation on net profits.

PD September 1993. TI Political Stability, Property Rights, and Economic Prospects in the Former Soviet Union. AA Brown University. SR Brown University Department of Economics Working Paper: 93-40; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 8. PR no charge. JE D78, H11, P26, P16. KW Political Instability. Economic Transition.
AB The political configuration of the former Soviet Union is in transition and the political regimes now in power have low survival probabilities. As a result, these regimes are not willing or able to undertake reform policies that are sufficiently foresighted and also credible. A strategy of conditional outside aid offers only a partial remedy to this situation. Conditionality can create incentives to reduce subsidies to uneconomic activities and to control monetary expansion, but conditionality cannot solve the critical problem of insecure property rights. This analysis suggests that we will not see dramatic improvements in living standards in the successor states to the former Soviet Union until the political configuration of the former Soviet Union has reached a stable equilibrium.

Grubb, Farley
PD October 1993. TI The Effect of Fraternity and Sorority Membership on Undergraduate Academic Performance. AU Grubb, Farley; Lackford, James. AA University of Delaware. SR University of Delaware Department of Economics Working Paper: 93-14; Department of Economics, University of Delaware, Newark, DE 19716. PG 23. PR not available. JE I20, I21. KW Education. College Education. Academic Performance.
AB Controlling for SAT scores, college major, gender, and parents' state of residence, university students were more likely to have joined a fraternity or sorority if they had come from in-state, had higher verbal SAT scores, but lower math SAT scores, the opposite of what the simple averages indicate. Controlling for the same variables, fraternity and sorority members achieved from 1 to 10 percent lower cumulative GPAs than non-Greek students. This negative effect was most pronounced for small fraternities and weakest for sororities. Controlling for the same variables, female and out-of-state students had higher GPA's than male and in-state students.

Gruber, Jonathan
PD December 1993. TI The Labor Market Effects of Introducing National Health Insurance: Evidence from Canada. AU Gruber, Jonathan; Hanratty, Maria. AA Gruber: Massachusetts Institute of Technology and National Bureau of

Economic Research. Hanratty: Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4589; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** $5.00. **JE** I10, I11, J21. **KW** National Health Insurance. Employment Effects.
AB While National Health Insurance (NHI) plans in the U.S. are often opposed on the basis of their potential disemployment effects, there is no existing evidence on the effects of NHI on employment. We provide such evidence by examining the employment consequences of NHI in Canada, using the fact that NHI was introduced on a staggered basis across 8 industries and 10 provinces over the 1961-1975 period. We find that employment actually rose after the introduction of NHI; wages increased as well, while average hours were unchanged.

PD December 1993. **TI** Health Insurance and Early Retirement: Evidence from the Availability of Continuation Coverage. **AU** Gruber, Jonathan; Madrian, Brigitte C. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4594; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** $5.00. **JE** I10, I11, I18, J14. **KW** Retirement. Health Insurance. Medical Expenses.
AB Although the vast majority of working individuals aged 55-64 receive health insurance coverage through their employment, many of these individuals face the prospect of losing such coverage should they retire before becoming eligible for guaranteed public coverage through Medicare at age 65. Because the expected medical expenses of this group are large and uncertain, the availability of health insurance coverage after retirement could be a key factor in the retirement decision of older workers. We examine the effect of health insurance on retirement by looking at variation in state and federal "continuation of coverage" mandates, laws which allow individuals to continue purchasing health insurance through a previous employer for a specified number of months after leaving the firm. By allowing individuals to maintain their employment-provided health insurance after retirement, these laws decrease the cost of early retirement for those who do not have other retiree health insurance available. Using data on 55-64 year old men from the Current Population Survey, we find that one year of continuation benefits increases the probability of being retired by 1 percentage point; this represents a 5.4 percent increase in the baseline probability of being retired for this group. We also find that continuation mandates increase the likelihood of being insured after retirement.

Guiso, Luigi
TI Dissaving by the Elderly, Transfer Motives and Liquidity Constraints. **AU** Ando, Albert; Terlizzese, Daniele; Guiso, Luigi.

Gul, Faruk
PD February 1992. **TI** Rationality and Coherent Theories of Strategic Behavior. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1990; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 49. **PR** no charge. **JE** C70, C72. **KW** Rationality. Rationalizability. Backward Induction. Forward Induction. Learning.
AB A non-equilibrium model of rational strategic behavior

that can be viewed as a refinement of (normal form) rationalizability is developed for both normal form and extensive form games. The resulting solution concept, called a tau-theory, allows for exogenous restrictions on the beliefs of rational prayers. The solution concept is used to analyze the main concerns of the Nash equilibrium refinements literature such as dominance, iterative dominance, extensive form rationality, invariance, backward induction and forward induction. The relationship between tau-theories and dynamic learning is investigated.

PD February 1992. **TI** On the Bayesian View in Game Theory and Economics. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1991; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 16. **PR** no charge. **JE** C70, C72, D80. **KW** Information Model. Subjective Probability. Bayesian Rationality. Correlated Equilibrium.
AB An analysis of the information model is presented to challenge the assertions that the information model and the notion of correlated equilibrium are consequences of the subjectivist, Bayesian view of uncertainty.

Hadri, Kaddour
PD January 1993. **TI** A Note on Sargan Densities and Econometric Modelling. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 93/01; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** 15. **PR** no charge. **JE** C10, C13, C24, C34. **KW** Sargan Densities. Disequilibrium Models. Maximum Likelihood Estimation.
AB The likelihood function of certain econometric models (disequilibrium models, multiple choice models and discrete or/and limited dependent variables models) contains the c.d.f. of the errors which is not in a closed form when the errors are assumed to be normal. This note reexamines the general class of Sargan densities analyzed by Goldfeld and Quandt (1981) and others in the context of approximating normal densities in these models. It suggests a third order Sargan density which complies with the Goldfeld and Quandt criteria, is unimodal and is the best approximation to the normal for orders less than or equal to 3. Some errors in Goldfeld and Quandt paper are corrected.

PD March 1993. **TI** Estimation of Disequilibrium Models Using the MGF and the CF Estimators. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 93/04; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** 18. **PR** no charge. **JE** C10, C13, C24, C34. **KW** Moment Generating Function. Characteristic Function. Estimators. Disequilibrium Models.
AB The estimation of disequilibrium models with sample separation unknown using maximum likelihood method may lead to computational difficulties because of the unboundedness of the likelihood function at the edge of the parameter-space. To overcome this difficulty, alternative estimation methods are suggested using the empirical moment generating function or the empirical characteristic function. These estimators are consistent and converge weakly to stationary Gaussian processes. They are applied to Portes and Winter (1980) one market disequilibrium model.

Hajivassiliou, Vassilis A.

PD September 1993. **TI** A Simulation Estimation Analysis of the External Debt Crisis of Developing Countries. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1057; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 15. **PR** no charge. **JE** F34, C35, C51, C13, C15. **KW** Simulated Maximum Likelihood. Simulated Scores. Gibbs Sampling.

AB In this paper I develop models of the incidence and extent of external financing crises of developing countries, which lead to multiperiod multinomial discrete choice and discrete/continuous econometric specifications with flexible correlation structures in the unobservables. I show that estimation of these models based on simulation methods has attractive statistical properties and is computationally tractable. Three such simulation estimation methods are exposited, analyzed theoretically, and used in practice: a method of smoothly simulated maximum likelihood (SSML) based on a smooth recursive conditioning simulator a method of simulated scores (MSS) based on a Gibbs sampling simulator (GSS), and an MSS estimator based on the SRC simulator. Previous studies of external debt problems had to rely on restrictive correlation structures in the unobservables to overcome otherwise intractable comutational difficulties. The findings show that being able to allow for flexible correlation patterns in the unobservables through estimation by simulation has a substantial impact on the parameter estimates obtained from such models.

PD October 1993. **TI** Macroeconomic Shocks in an Aggregative Disequilibrium Model. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1063; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 12. **PR** no charge. **JE** C51, C13, E10. **KW** Macroeconomic Models. Simulation Estimation. Aggregation.

AB In this paper, I first show how aggregation over submarkets that exhibit varying degrees of disequilibrium can provide a foundation to the classic "short-side" disequilibrium econometric model of Fair and Jaffee. I then introduce explicit randomness in the aggregative model as arising from economy-wide demand and supply shocks, which are allowed to be serially correlated. I develop suitable simulation estimation methods to circumvent hitherto intractable computational problems resulting from serial correlation in the unobservables in disequilibrium analysis. I show that the introduction of macroeconomic shocks has fundamentally different implications compared to the traditional approach that arbitrarily appends an additive disturbance term to the basic equation of the model. A major finding is that the introduction of macroeconomic shocks is able to explain a large part of the residual serial correlation that was plaguing traditional studies. Moreover, the new modeling technique yields considerably more satisfactory estimates of the supply side of the markets.

Halikias, Ioannis

PD October 1993. **TI** Testing the Credibility of Belgium's Exchange Rate Policy. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 93/76; International Monetary Fund, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E43, F31, F33. **KW** Exchange Rates. Credibility. Monetary Authority.

AB This paper examines the credibility of the exchange rate policy pursued by the Belgian monetary authorities of pegging the Belgian franc to a narrow fluctuation band around the deutsche mark, in the context of the exchange rate mechanism of the European Monetary System. Simple interest rate corridor analysis, based on the Belgian-German long-term interest rate differential and taking explicit account of the currency's position within its fluctuation band, would appear to suggest that the hypothesis that long-run exchange rate credibility has been attained should be rejected, even though considerable progress has been made in this regard since the early 1980's. The paper proceeds to decompose the Belgian-German interest rate differential into a sovereign credit risk and an exchange rate risk that long-run exchange rate credibility cannot be rejected from 1990 onward.

Haller, H. H.

TI The Value of Failure. **AU** Pavlopoulos, A.; Haller, H. H.

Haltiwanger, John

TI Evidence on Macroeconomic Complementarities. **AU** Cooper, Russell W.; Haltiwanger, John.

Hamann, Javier

PD November 1993. **TI** Financial Liberalization and the Information Content of Money in Indonesia, Korea, and the Philippines. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 93/88; International Monetary Fund, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E52. **KW** Financial Systems. Money. Financial Liberalization.

AB Using a VAR approach, this paper studies the relationship between money, output, and prices in a group of Pacific Basin countries that underwent financial sector reform during the 1980's: Indonesia, Korea and the Philippines. Special attention is paid to assessing the information content of money. Money was found to contain valuable advance information on output and prices in Korea, on prices only in the Philippines, and did not contain any advance information in Indonesia. The introduction of financial sector reform was not found to lead to a structural break in the price and output equations; however, the information content of money was affected. Further tests show that exchange and interest rates -- variables that gained flexibility with the reforms--contain valuable information about future developments in prices in Korea and the Philippines.

Hamilton, Gary G.

TI Market Structure and International Trade: Business Groups in East Asia. **AU** Feenstra, Robert C.; Yang, Tzu-Han; Hamilton, Gary G.

Hamlin, Alan

TI Rationalizing Parliamentary Systems. **AU** Brennan, Geoffrey; Hamlin, Alan.

TI A Revisionist View of the Separation of Powers. **AU** Brennan, Geoffrey; Hamlin, Alan.

Hanemann, W. Michael

TI On the Creation and Destruction of Public Goods: The Matter of Sequencing. **AU** Carson, Richard; Flores, Nicholas

E.; Hanemann, W. Michael.

PD November 1993. **TI** Three Approaches to Defining "Existence" or "Non-Use" Value Under Certainty. **AA** University of California, Berkeley. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 691; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 8. **PR** $5.00. **JE** H41, D46. **KW** Public Goods. Weak Complementarity. Contingent Valuation.
AB The paper describes three approaches to defining "existence" or "non-use" value.

Hanratty, Maria
TI The Labor Market Effects of Introducing National Health Insurance: Evidence from Canada. **AU** Gruber, Jonathan; Hanratty, Maria.

Hansen, Bruce E.
TI Are Seasonal Patterns Constant Over Time? A Test for Seasonal Stability. **AU** Canova, Fabio; Hansen, Bruce E.

Hardle, Wolfgang
PD June 1993. **TI** A Bootstrap Test for Single Index Models. **AU** Hardle, Wolfgang; Dias Proenca, Isabel M. **AA** Hardle: Humboldt Universitat zu Berlin. Dias Proenca: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9325; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 16. **PR** not available. **JE** C40, C12, C43. **KW** Single Index Models. Bootstrapping.
AB Single index models are frequently used in econometrics and biometrics. Logit and probit models are special cases with fixed link functions. In this paper we consider a specification test that detects nonparametric deviations of the link function, e.g., testing against a semiparametric alternative. Simulations with single index models have shown that the empirical power of this test may be affected in small samples. In this work the bootstrap is used with the aim to find a more accurate distribution under the null than the standard normal. We prove that the statistic and its bootstrapped version have the same asymptotic distribution. A simulation study is performed to investigate the empirical behavior of this approach. The bootstrapped critical values yield better approximations to the true values.

TI Applied Nonparametric Methods. **AU** Linton, Oliver B.; Hardle, Wolfgang.

Hardouvelis, Gikas A.
PD December 1993. **TI** What Moves the Discount on Country Equity Funds? **AU** Hardouvelis, Gikas A.; Wizman, Thierry A.; La Porta, Rafael. **AA** Hardouvelis: Rutgers University. Wizman: Federal Reserve Bank of New York. La Porta: Harvard University. **SR** National Bureau of Economic Research Working Paper: 4571; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 45. **PR** $5.00. **JE** G12, G15. **KW** Closed-End Funds. Equity Funds. Fund Discounts.
AB The paper characterizes several empirical regularities of closed-end fund prices and examines the extent to which a "sentiment" model of asset prices is consistent with the empirical regularities. We find that after controlling for the effect of cross-border investment restrictions, country funds trade at an average discount. Discounts vary substantially and contribute to a variance in country fund weekly returns which is generally three times greater than the returns on the net asset value (NAV). Regression analysis suggests that discounts have predictive power for fund returns but not for NAV returns, suggesting that investor "sentiment" is a component of the price of a fund and not its NAV. Estimation of an unobserved components model on the discounts of the funds reveals a significant and strongly persistent common component across fund discounts. Regressions of fund and NAV returns on financial variables reveal that fund prices are "sticky" with respect to movements in the host country's stock market and overly sensitive to variation in the U.S. and world stock markets. This relation is unaffected when we consider separately funds whose host countries restrict cross-border investment and funds which invest in emerging stock markets.

Hargraves, Monica
PD October 1993. **TI** Asset Price Inflation in the 1980's: A Flow of Funds Perspective. **AU** Hargraves, Monica; Schinasi, Garry J.; Weisbrod, Steven R. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 93/77; International Monetary Fund, Washington, DC 20431. **PG** 26. **PR** not available. **JE** E31, E44, G21. **KW** Flow of Funds. Financial Resources. Asset Markets.
AB This paper examines how and why financial resources were channeled almost exclusively to specific asset markets in Japan, the United Kingdom, and the United States in the late 1980's. A decline in demand for funds by traditional borrowers, and a shift by savers from banks toward indirect securities investments were critical factors in all three cases. Until intermediaries and investors learned to evaluate new opportunities, funds were recycled in certain asset markets. The pressures on Japanese asset markets were particularly intense because of the size of Japan's domestic saving relative to traditional domestic investment opportunities.

Harhoff, Dietmar
PD November 1993. **TI** Financing Apprenticeship Training: Evidence from Germany. **AU** Harhoff, Dietmar; Kane, Thomas J. **AA** Harhoff: University of Mannheim and Zentrum fur Europaische Wirtschaftsforschung. Kane: Harvard University. **SR** John F. Kennedy School of Government Discussion Paper: R93-36; Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138. **PG** 28. **PR** no charge. **JE** J24, J40. **KW** Human Capital Formation. Apprenticeship.
AB The relative lack of human capital investment by U.S. firms may be rooted more deeply in our labor market institutions. This paper discusses the structure of incentives undergirding the German system of apprenticeship training. Many German firms face large net costs of apprenticeship training. Yet they continue to provide such training in spite of considerable worker turnover upon completion of the training. The simplest human capital model suggests that employers would be willing to finance only firm-specific training. Rather than engage in a futile debate over the general or specific nature of the skills being provided we first describe and evaluate 3 characteristics of the German labor market which may lead firms to accept part of the cost of general training even in the face of worker turnover. We then attempt to

understand why German workers and firms may be more willing to invest even in firm-specific skills than in the U.S.

PD December 1993. **TI** Financing Apprenticeship Training: Evidence From Germany. **AU** Harhoff, Dietmar; Kane, Thomas J. **AA** Harhoff: University of Mannheim. Kane: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4557; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** $5.00. **JE** J24, J20, I20. **KW** Human Capital Formation. Apprenticeship. Vocational Training.
AB Much of the current discussion promoting apprenticeship programs in the U.S. proceeds as if it is simply a matter of historical accident or lack of imagination which has hindered human capital investment by U.S. firms. However, the cause may be rooted more deeply in our labor market institutions. This paper discusses the structure of incentives undergirding the German system of apprenticeship training. Many German firms face large net costs of apprenticeship training. Yet they continue to provide such training in spite of considerable worker turnover upon completion of the training. The simplest human capital model suggests that employers would be willing to finance only firm-specific training. Rather than engage in a futile debate over the general or specific nature of the skills being provided, we first describe and evaluate 3 characteristics of the German labor market which may lead firms to accept part of the cost of general training even in the face of worker turnover. We then attempt to understand why German workers and firms may be more willing to invest even in firm-specific skills than in the U.S.. Finally, we discuss some implications of these results for the current vocational training debate in the U.S.

Harjes, Richard H.
TI Another Look at Alternative Models of the Short-Term Interest Rate. **AU** Brenner, Robin J.; Harjes, Richard H.

Harris, Mark N.
TI A Monte Carlo Study of Tests for the Independence of Irrelevant Alternatives Property. **AU** Fry, Tim R. L.; Harris, Mark N.

TI A Comparative Analysis of Different Monte Carlo Methods. **AU** Matyas, Laszlo; Harris, Mark N.

Harvey, Campbell R.
TI An Exploratory Investigation of the Fundamental Determinants of National Equity Market Returns. **AU** Ferson, Wayne E.; Harvey, Campbell R.

Hatch, Nile
TI Alternatives for Managing Drought: A Comparative Cost Analysis. **AU** Fisher, Anthony; Fullerton, David; Hatch, Nile; Reinelt, Peter.

Heathfield, David F.
PD August 1993. **TI** Economics of Scope, Economies of Scale, Cost and Production Functions. **AU** Heathfield, David F.; Raja, A.V. **AA** Heathfield: University of Southampton. Raja: University of Hyderabad. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9309; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 13.

PR no charge. **JE** D24. **KW** Cost Functions. Scale Economies. Scope Economies.
AB In their seminal work Baumol, Panzar and Willig (1982) define economies of scope in terms of total cost functions and claim that cost complimentaries are sufficient for economies of scope. They then offer a number of possible functional forms of cost functions which satisfy their desiderata but which are not derived from production functions. It is argued here that their definition is too weak to distinguish properly between economies of scope and economies of scale both of which can appear in the cost function when the underlying production function has no such properties. These points are demonstrated by deriving the self duals of simple instantaneous flow production functions with constant returns to scale.

PD August 1993. **TI** Aggregate Demand: A Restatement. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9310; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 19. **PR** no charge. **JE** E12, E61. **KW** Keynes. Aggregate Demand.
AB This paper re-examines the Keynesian arguments for engaging in policies designed to manipulate aggregate demand. Even in these times of supply side dominance the importance of demand is recognized, albeit implicitly rather than explicitly, but no "interference" in aggregate demand seems to be tolerable. This neglect of demand policies arises partly because Keynesian arguments have been misrepresented as relying on fixity of wages and/or prices and partly by the introduction of automatic correcting devices such as the wealth effect. The model here is strongly rooted in neo-classical assumptions with fully flexible prices and wages, perfect competition, and auctioneer and a "well behaved" aggregate production function. Given all this it is shown that aggregate demand is still problematic and that such problems may be eased by fiscal expansions.

Helpman, Elhanan
TI International R&D Spillovers. **AU** Coe, David T.; Helpman, Elhanan.

TI The Politics of Free Trade Agreements. **AU** Grossman, Gene M.; Helpman, Elhanan.

Henderson, Dale W.
PD November 1993. **TI** A Comparison of Some Basic Monetary Policy Regimes: Implications of Different Degrees of Instrument Adjustment and Wage Persistence. **AU** Henderson, Dale W.; McKibbin, Warwick J. **AA** Henderson: Board of Governors of the Federal Reserve System. McKibbin: The Brookings Institution. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 458; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 119. **PR** no charge. **JE** E52, F41. **KW** Monetary Policy. Open Economy. Instrument Adjustment. Wage Persistence.
AB Monetary policy regime combinations are compared for symmetric and asymmetric temporary shocks to money demand, goods demand, and productivity. In every region, the interest-rate instrument is either kept constant or changed to eliminate (full instrument adjustment) or reduce (partial instrument adjustment) the gap between actual and desired

values for an intermediate target: the money supply, nominal income, or output plus inflation. Nominal wage persistence may be absent (Contract hypothesis) or present (Phillips hypothesis and Taylor hypothesis). There are analytical and simulation results from a two-region workhorse model and simulation results from the McKibbin-Sachs Global model. The ranking of regime combinations depends not only on the ultimate target and the source of shocks but also on the degrees of instrument adjustment and wage persistence.

Hendry, David F.
TI Cointegration, Seasonality, Encompassing, and the Demand for Money in the United Kingdom. AU Ericsson, Neil R.; Hendry, David F.; Tran, Hong-Anh.

Hersch, Joni
PD 1993. TI Housework, Effort and Wages of Married Workers. AU Hersch, Joni; Stratton, Leslie S. AA Hersch: University of Wyoming. Stratton: University of Arizona. SR University of Arizona Economics Working Paper: 93-12 ; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. PG 19. PR $2 Canada and U.S.; $3 Overseas by air. JE J16, J31. KW Gender Differences. Wage Gap.
AB Although the primacy of household responsibilities in determining gender differences in labor market outcomes is universally recognized, there has been little investigation of its direct effect. Data from the PSID are used here to show that housework time has a direct negative effect upon the earnings of both married men and married women. The magnitude of the effect is stronger for women and persists in instrumental variables and fixed effects specifications, which control for the endogeneity of housework time and unobserved individual specific characteristics, respectively. Since married women's housework time is, on average, three times that of married men's, controlling for housework time reduces the unexplained gender wage gap by approximately 10 percentage points but still leaves over 50 percent unexplained.

PD 1993. TI Housework, Wages, and the Division of Housework Time for Employed Spouses. AU Hersch, Joni; Stratton, Leslie S. AA Hersch: University of Wyoming. Stratton: University of Arizona. SR University of Arizona Economics Working Paper: 93-13; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. PG 8. PR $2 Canada and U.S.; $3 Overseas by air. JE J22, J16. KW Time Allocation. Gender Differences.
AB Research indicating that time spent on housework has a significant negative effect on wages, especially for women, and that gender differences in household responsibilities are significant, with women spending between two and three times as much time on housework, is reviewed. These findings suggest that decisions regarding the overall amount of time spent on housework and the division of that time within the household are important ones. Data from the PSID are employed here to analyze these allocation decisions. The results support the predictions of both human capital and bargaining theories. Husbands do less housework than their wives as their relative earnings and hours spent in the labor market increase.

Hetland, Norman
TI Dimensions of the Global Processing Tomato Industry. AU Moulton, Kirby; Garoyan, Leon; Hetland, Norman.

Hilbers, Paul
PD November 1993. TI Monetary Instruments and Their Use During the Transition from a Centrally Planned to a Market Economy. AA The Netherlands Bank and International Monetary Fund. SR International Monetary Fund Working Paper: 93/87; International Monetary Fund, Washington, DC 20431. PG 26. PR not available. JE E52. KW Monetary Policy. Monetary Instruments. Transition. Financial System.
AB This paper discusses different instruments of monetary policy, and in particular the choice between direct and indirect instruments. It identifies the main characteristics of a country's financial system that should be considered in selecting monetary instruments, and analyzes how these characteristics should influence that selection in countries that are progressing from a state-controlled to a market economy. The characteristics of the financial system during the initial stage of the transition sometimes favor relatively direct instruments. At this stage market-based variants of direct instruments may combine the necessary effectiveness in reducing monetary expansion with the need to introduce and stimulate competition in the financial markets. During this stage indirect instruments can be developed and tested ("belt and braces" approach). In later stages, as experience is gained, these indirect instruments can gradually replace the more direct controls.

Hines, James R., Jr
PD November 1993. TI No Place Like Home: Tax Incentives and the Location of R&D by American Multinationals. AA Harvard University. SR John F. Kennedy School of Government Discussion Paper: R93-39; Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138. PG 35. PR no charge. JE F23, H25, O32, H32. KW Multinational Firms. Tax Reform. Research and Development.
AB See other entry.

PD December 1993. TI No Place Like Home: Tax Incentives and the Location of R&D by American Multinationals. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4574; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 35. PR $5.00. JE F23, H20, O32. KW Multinationals. Tax Incentives. Tax Reform Act. Research and Development.
AB This paper analyzes the effects of the U.S. tax treatment of the R&D activities of American multinationals. Recent evidence indicates that the level of R&D spending is highly sensitive to its after-tax cost. The U.S. Tax Reform Act of 1986 reduced the tax deductions that many American firms can claim for their R&D expenses incurred in the U.S., and on this basis, observers predicted that American firms would react to the tax change by significantly increasing the fraction of their R&D that they perform abroad. Aggregate data indicate that this fraction instead stayed roughly constant, at around 10%. An important reason why U.S. firms did not move more of their total R&D activity offshore is that U.S. tax law provides quite generous treatment of R&D performed in the U.S. for use abroad by firms with excess foreign tax credits, and the Tax Reform Act of 1986 significantly increased the number of American firms with excess foreign tax credits. Hence, the 1986 tax change increased the cost of U.S.-based R&D for some American firms, and reduced it for others, with little

impact on the overall fraction of R&D spending that U.S. firms do abroad. One consequence of the tax law changes of the late 1980's is that, by 1991, the tax treatment of foreign-source royalties received by American firms with excess foreign tax credits has five times the revenue impact of the Research and Experimentation Tax Credit.

Hogan, Kedreth C.
PD June 1993. **TI** Program Trading, Non-Program Trading and Market Volatility. **AU** Hogan, Kedreth C.; Kroner, Kenneth F.; Sultan, Jahangir. **AA** Hogan: McGill University. Kroner: University of Arizona. Sultan: Bentley College. **SR** University of Arizona Economics Working Paper: 93-2; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. **PG** 14. **PR** $2 Canada and U.S.; $3 Overseas by air. **JE** C32, G10, G12, G13. **KW** Error Correction Model. Program Trading. Trading Volume.
AB We use a bivariate GARCH error correction model to demonstrate that the relationship between non-program trading and volatility differs from the relationship between program trading and volatility in the S&P 500 cash and futures markets. This suggests that the existing models of trading volume and price volatility may be inadequate to capture the volume/volatility relationship for program trading, and a new set of models need to be developed. We also find that the strong correlation between overall volume and volatility is caused mostly by program trading volume. Furthermore, we find evidence that buy program trades are associated with a smaller increase in market volatility than are sell program trades, and that the effects of program trading on volatility are similar in both the cash and the futures market.

Holtz Wooders, Myrna
TI The Partnered Core of a Game with Side Payments.
AU Reny, Philip J.; Winter, Eyal; Holtz Wooders, Myrna.

Holtz-Eakin, Douglas
PD July 1993. **TI** Sticking It Out: Entrepreneurial Survival and Liquidity Constraints. **AU** Holtz-Eakin, Douglas; Joulfaian, David; Rosen, Harvey S. **AA** Holtz-Eakin: Syracuse University. Joulfaian: U.S. Department of Treasury. Rosen: Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 319; Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 23. **PR** $1.50. **JE** M13. **KW** Entrepreneurship. Liquidity Constraints.
AB We examine why some individuals survive as entrepreneurs and others do not. In addition, we analyze the growth of entrepreneurial enterprises, conditional on surviving. Our focus is on the role of access to capital--to what extent do liquidity constraints increase the likelihood of entrepreneurial failure? The empirical strategy is based on the following logic: If entrepreneurs cannot borrow to attain their profit-maximizing levels of capital, then those entrepreneurs who have substantial personal financial resources will be more successful than those who do not. The data consist of the 1981 and 1985 federal individual income tax returns of a group of people who received inheritances. These data allow us to identify those individuals who were sole proprietors in 1981, and to determine the extent to which the decision to remain a sole proprietor was influenced by the magnitude of the inheritance-induced increase in liquidity. The results are consistent with the notion

that liquidity constraints exert a noticeable influence on the viability of entrepreneurial enterprises.

Hooper, Peter. Marquez, Jaime
PD October 1993. **TI** Exchange Rates, Prices, and External Adjustment in the United States and Japan. **AA** Board of Governors of the Federal Reserve. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 456; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 53. **PR** no charge. **JE** F40, C50, F10. **KW** Trade Imbalances. Income Elasticities. Price Elasticities. Exchange Rates. Pass-Through.
AB This paper studies the responsiveness of external balances--trade volumes and prices--to changes in exchange rates. Our objectives are twofold: to provide an analytical review of the literature in this area and to assess the influence of exchange rate movements on external adjustment in the two countries whose external imbalances have dominated all others over the past decade, the United States and Japan. We find that the conventional partial-equilibrium model of the trade balance has performed generally quite well in predicting the path of the U.S. and Japanese external balance over the past decade. Second, in a partial-equilibrium setting, exchange- rate changes have a significant and substantial influence on movements in external balances. This view is supported by a massive empirical literature focusing on the estimation of price elasticities in trade, by casual inspection of the data, and by our own econometric estimates of trade elasticities. Third, Japanese real trade flows appear to be considerably less responsive to exchange-rate changes than U.S. real trade flows. This asymmetry can be traced only in part to evidence that Japanese exporters and U.S. exporters differ in the extent to which they pass-through exchange-rate changes to the foreign currency prices of their exports. Finally, Japanese exporters tend to pass through significantly less of any given percentage exchange rate change than U.S. exporters.

Hoover, Kevin D.
PD January 1994. **TI** Why Does Methodology Matter for Economics? A Review Article. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 94-04; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 25. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** B41. **KW** Economic Methodology. Philosophy of Science. Rhetoric.
AB This article considers four recent books on the methodology of economics: the second edition of Mark Blaug's widely known "The Methodology of Economics: Or How Economists Explain," Daniel Hausman's "The Inexact and Separate Science of Economics," Alexander Rosenberg's "Economics: Mathematical Politics or Science of Diminishing Returns," Lawrence A. Boland's "The Principles of Economics: Some Lies My Teachers Told Me." Each is considered in the context of the questions: Does methodology matter for practicing economists? And, if so, how?.

Hopenhayn, Hugo A.
PD December 1991. **TI** Entry, Exit and Firm Dynamics in Long Run Equilibrium. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1180; Graduate School of Business, Stanford University,

Stanford, CA 94305-5015. **PG** not available. **PR** no charge. **JE** D92, C60, D40. **KW** Entry. Exit. Firm Dynamics. Turnover. Dynamics. Industry Equilibrium.
AB No abstract available.

Houseman, Susan N.

PD October 1993. **TI** Labor Adjustment Under Different Institutional Structures: A Case Study of Germany and the United States. **AU** Houseman, Susan N.; Abraham, Katharine G. **AA** Houseman: W. E. Upjohn Institute for Employment Research. Abraham: University of Maryland and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4548; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** $5.00. **JE** J20, J23. **KW** Labor Adjustment. Layoffs. Demand Shocks.
AB Like most Western European countries, Germany stringently regulates dismissals and layoffs. Critics contend that this regulation raises the costs of employment adjustment and hence impedes employers' ability to respond to fluctuations in demand. Other German labor policies, however, most especially the availability of unemployment insurance benefits for those on short time, facilitate the adjustment of average hours per worker in lieu of layoffs. Building on earlier work, we compare the adjustment of employment, hours and inventories to demand shocks in the German and U.S. manufacturing sectors. We find that, in the short run, whereas U.S. employers rely principally on the adjustment of employment levels to respond to demand shocks, German employers rely principally on the adjustment of average hours per worker. The adjustment of overall labor input is generally similar in the two countries. Short-time work makes a very important contribution to short-run hours adjustment in Germany. We find little evidence that inventories help to buffer demand fluctuations in either country. Our findings suggest that, given appropriate supporting institutions, strong worker job security can be compatible with employers' need for flexibility in staffing levels.

TI Earnings Inequality in Germany. **AU** Abraham, Katharine G.; Houseman, Susan N.

Huddart, Steven

PD August 1992. **TI** Employee Stock Options. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1121; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 48. **PR** no charge. **JE** J33. **KW** Option. Tax Inducement. Algorithm. Inalienable.
AB No abstract available.

Hulten, Charles R.

PD November 1993. **TI** Endogenous Growth, Public Capital, and the Convergence of Regional Manufacturing Industry. **AU** Hulten, Charles R.; Schwab, Robert M. **AA** Hulten: University of Maryland and National Bureau of Economic Research. Schwab: University of Maryland. **SR** National Bureau of Economic Research Working Paper: 4538; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $5.00. **JE** O40, O41, O47. **KW** Convergence Hypothesis. Endogenous Growth. Location Theory.
AB Several explanations can be offered for the unbalanced growth of U.S. regional manufacturing industries in the decades after World War II. The convergence hypothesis

suggests that the success of the South in catching up to the Northeast and Midwest should be understood by analogy with the economic success of Japan and the rest of the G-7 in closing the gap relative to the U.S. as a whole. Endogenous growth theory, on the other hand, assigns a central role to capital formation, broadly defined. A variant of endogenous growth theory focuses on investments in public infrastructure as a key determinant of regional growth. Finally, traditional location theory stresses the evolution of regional supply and demand and the role of economies of scale and agglomeration. This paper compares these alternative explanations of U.S. regional growth by testing their predictions about the productive efficiency of regional manufacturing industries. We find little evidence that technological convergence explains the regional evolution of U.S. manufacturing industry, or that endogenous growth was an important factor. We also find little evidence that public capital externalities played a significant role in explaining the relative success of industries in the South and West. The main engine of differential regional manufacturing growth over the period 1970-86 seems to be inter-regional flows of capital and labor. The growth of multifactor productivity is essentially uniform across regions, although there is some variation in the initial levels of efficiency.

Hurd, Michael

PD December 1993. **TI** The Relationship Between Job Characteristics and Retirement. **AU** Hurd, Michael; McGarry, Kathleen. **AA** Hurd: State University of New York-Stony Brook and National Bureau of Economic Research. McGarry: University of California, Los Angeles and National Bureau of Economics. **SR** National Bureau of Economic Research Working Paper: 4558; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $5.00. **JE** J20, J22, J14. **KW** Retirement. Job Requirements. Job Flexibility.
AB We study the influence of job characteristics on prospective retirement as measured by the probability of working past age 62 or 65. The characteristics fall into three broad classes: physical and mental requirements, job flexibility including employer accommodation to older workers, and financial aspects such as pensions and health care insurance. Using data from the Health and Retirement Survey, we find that physical and mental job requirements have a rather small influence on prospective retirement, whereas measures of job flexibility and financial aspects of the job are important determinants.

PD December 1993. **TI** Evaluation of Subjective Probability Distributions in the HRS. **AU** Hurd, Michael; McGarry, Kathleen. **AA** Hurd: State University of New York-Stony Brook and National Bureau of Economic Research. McGarry: University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4560; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** $5.00. **JE** J14, I12. **KW** Aging. Life Expectancy.
AB In the Health and Retirement Survey respondents were asked about the chances they would live to 75 or to 85, and the chances they would work after age 62 or 65. We analyze the responses to determine if they behave like probabilities, if their averages are close to average probabilities in the population, and if they have correlations with other variables that are similar to correlations with actual outcomes. We find that

generally they do behave like probabilities and they do aggregate. Most remarkable, however, is that they covary with other variables in the same way actual outcomes vary with the variables. For example, smokers give lower probabilities of living to 75 than nonsmokers. We conclude that these measures of subjective probabilities have great potential use in models of intertemporal decision making under uncertainty.

Ikenberry, D.

PD December 1993. **TI** Market Underreaction to Open Market Share Repurchases. **AU** Ikenberry, D.; Lakonishok, J.; Vermaelen, T. **AA** Ikenberry: Rice University. Lakonishok: University of Illinois at Urbana- Champaign. Vermaelen: INSEAD. **SR** INSEAD Working Papers: 93/89/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 22. **PR** not available. **JE** G12, G14. **KW** Undervaluation. Share Repurchases.

AB Although firms repurchase shares on the open market for a variety of reasons, undervaluation is one of the most frequently mentioned motives. Yet surprisingly, the average market reaction to the news of a share repurchase is only 3.5 percent. In this paper, we examine the long-run performance of 1,239 open market share repurchase announced during the period 1980 to 1990. Using carefully constructed benchmarks, we find that the average excess four-year buy-and-hold return after the announcement is 12.6 percent. For "value" stocks, companies that are more likely to be making repurchases because of valuation reasons, the average excess return is 45 percent. Thus undervaluation does indeed appear to be an important motive. Furthermore, it also appears that the market errs in its initial response and ignores much of the signal conveyed by this type of repurchase announcement.

Imbens, Guido

PD December 1993. **TI** Re-employment Probabilities Over the Business Cycle. **AU** Imbens, Guido.; Lynch, Lisa M. **AA** Imbens: Harvard University and National Bureau of Economic Research. Lynch: Tufts University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4585; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** $5.00. **JE** E20, E24, E30. **KW** Business Cycle. Employment. Jobless Spells. Unemployment.

AB Using a Cox proportional hazard model that allows for a flexible time dependence that can incorporate both seasonal and business cycle effects, we analyze the determinants of re-employment probabilities of young workers from 1978-1989. We find considerable changes in the chances of young workers finding jobs over the business cycle, however, the characteristics of those starting jobless spells do not vary much over time. Therefore, government programs that target specific demographic groups may change individuals' positions within the queue of job seekers but will probably have a more limited impact on the overall re-employment probability. Living in an area with high local unemployment reduces re-employment chances as does being in a long spell of non-employment. However, when we allow for an interaction between the length of time of a jobless spell and the local unemployment rate we find the interaction term is positive. In other words, while workers appear to be scared by a long spell of unemployment, the damage seems to be reduced if they are unemployed in an area with high overall unemployment.

Ingham, Alan

PD September 1993. **TI** An Examination of the Council Tax Banding of 1991 Using Quantal Response Analysis. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9315; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 37. **PR** no charge. **JE** R21, R31. **KW** Property Valuation. Housing Prices. Ordered Probit.

AB The valuation of all property in Great Britain undertaken by the Property Valuation Office for the purposes of local taxation presents a picture of property valuation comparable to that of the Domesday Book. This paper is concerned with the valuations as revealed by the prices that are asked for houses up for sale, and whether there is any variation between areas in the bandings. This is done using a comparison of statistical models including the ordered probit, multinominal logit, and the linear regression model. The analysis suggests that the valuations implicit in the banding are fairly consistent with asking prices. There seems to be a 20% overestimate but this is consistent with allowances for disequilibrium and for price reduction in bargaining.

Ip, Wai Cheung

PD September 1992. **TI** Bootstrapping Two-Stage Least Squares Estimates. **AU** Ip, Wai Cheung; Phillips, Garry D. A. **AA** Ip: Hong Kong Polytechnic. Phillips: University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 92/10; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** 44. **PR** no charge. **JE** C10. **KW** Bootstrapping. Simultaneous Equations.

AB This paper examines Efron's bootstrap methodology as an inferential procedure in simultaneous equations. A theoretical justification is provided for the use of the bootstrap; in particular, it is shown to be unbiased to order 1/T. Its performance in bias correction and variance estimation is compared with that of standard procedures in the context of a Monte Carlo simulation of a two equation static simultaneous equation model. The bootstrap is shown to be a useful addition to the inferential tools available to econometricians.

Isaac, R. Mark

TI An Experimental Study of Cost-Sharing Contracts for Procurement: Market Performance Results. **AU** Cech, Paula-Ann; Cox, James C.; Isaac, R. Mark; Conn, David.

Ise, Sabrina

PD September 1993. **TI** Legal Status and Earnings of Agricultural Workers. **AU** Ise, Sabrina; Perloff, Jeffrey M. **AA** University of California, Berkeley. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 680; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 13. **PR** $6.75. **JE** J43, J31. **KW** Agricultural Labor. Agricultural Wages. Legal Status.

AB Using new survey data, we examine whether agricultural workers have wage, weekly hours, or weekly earnings differential by legal status. With the passage of the Immigration Reform and Control Act (IRCA) of 1986, a large number of undocumented agricultural workers were granted amnesty, which entitles them to remain in this country legally. Many

farmers and others expected this change in status to have wide-ranging labor market effects including driving up wages of farm workers. Farm worker advocates argue that workers who are not in this country legally are exploited and paid substantially less than others. Using the U.S. Department of Labor's National Agricultural Worker's Survey (NAWS), we estimate a system of equations for legal status, wages, and weekly hours taking into account possible sample selection bias. Based on these estimates, we calculate the effect of legal status on wages, hours, and weekly earnings.

Ito, Takatoshi

PD November 1993. **TI** Short-Run and Long-Run Expectations of the Yen/Dollar Exchange Rate. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4545; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** $5.00. **JE** F30, F31. **KW** Exchange Rates. Mean Reversion.

AB The survey data of the yen/dollar exchange rate, collected twice a month for eight years from 1985 to 1993, shows the following features. First, the expected exchange rate changes in the short horizon (one month) is of the band-wagon type while the expected changes in the long horizon (three to six months) is of the mean-reversion type. That is, in the exchange traders infer from recent appreciations or depreciation that the recent change in the exchange rate will continue for a while, but the direction of changes will reverse, eventually. Second, this result is robust for the entire sample period, which includes subperiods of sharp yen appreciations and of relative calm, and with respect to different specifications. Third, the deviation from an equilibrium exchange rate does not yield a robust estimate in the regression of expectation formation. Although the history of the yen/dollar exchange rate fluctuations in the past two decades shows mean reversion over several years, they are not captured in the six-month expectations in the survey data.

PD December 1993. **TI** Price Volatility and Volume Spillovers Between the Tokyo and New York Stock Markets. **AU** Ito, Takatoshi; Lin, Wen-Ling. **AA** Ito: Harvard University and National Bureau of Economic Research. Lin: University of Wisconsin-Madison. **SR** National Bureau of Economic Research Working Paper: 4592; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** $5.00. **JE** G12, G14, G15, G10. **KW** Stock Price Volatility. Trading Volume. Spillovers.

AB This paper presents a comprehensive study of the interactions among returns, volatility, and trading volume between the U.S. and Japanese stock markets by using intradaily data from October 1985 to December 1991. By examining the effect of foreign price volatility and trading volume on correlations between foreign and domestic stock returns, the paper aims to distinguish between the market contagion and informational efficiency hypotheses in order to explain the cause of international transmission of stock returns and volatility. Major findings are three-fold: (1) contemporaneous correlations of stock returns across these two markets are significant and tend to increase during a high volatility period, which support the informational efficiency hypothesis; (2) lagged volatility and volume spillovers are not found across the two markets; (3) the effect of the New York stock returns on the Tokyo returns exhibits a structural change

in October 1987.

Iyigun, Murat

TI Population Increase, Extralegal Appropriation, and the End of Colonialism. **AU** Grossman, Herschel I.; Iyigun, Murat.

Jacklin, Charles J.

PD August 1993. **TI** Market Rate Versus Fixed Rate Demand Deposits. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1265; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 29. **PR** no charge. **JE** G21, G28. **KW** Banks. Government Policy. Regulation.

AB In an economy with uninsured banks, market rate deposits are shown to provide services identical to fixed rate deposits without risking banking panics as long as there is not both aggregate uncertainty about liquidity demands and asymmetric information about bank asset quality. However, if both assets and information revealed through market prices. The analysis may explain the evolution of fixed rate deposits before the introduction of deposit insurance. Moreover, it provides currently relevant insights regarding deposit contract forms and deposit insurance.

Jaffe, Adam B.

PD December 1993. **TI** Environmental Regulation and International Competitiveness: What Does the Evidence Tell Us? **AU** Jaffe, Adam B.; Peterson, Steven R.; Portney, Paul R.; Stavins, Robert N. **AA** Jaffe: Harvard University and National Bureau of Economic Research. Peterson: Economics Resource Group. Stavins: Resources for the Future and Harvard University. Portney: Resources for the Future. **SR** Harvard John F. Kennedy School of Government Discussion Paper: R93-42; John F. Kennedy School of Government, 79 John F. Kennedy Street, Cambridge, MA 02138. **PG** 22. **PR** no charge. **JE** L51, Q28, Q38, F14. **KW** Environmental Policy. International Competitiveness.

AB There is a heated debated among policy makers about the relationship between domestic environmental regulation and international competitiveness. The conventional wisdom among economists is that environmental regulations impose significant costs, slow productivity growth, and thereby hinder the ability of U.S. firms to compete in international markets. Under a more recent, revisionist view, environmental regulations are seen as being not only benign in their impacts on international competitiveness, but actually a net positive force driving private firms and the economy as a whole to become more efficient and competitive in international markets. We assess the evidence and find that there is little or none to document either view Policy makers should strive to set environmental priorities that are consistent with the real tradeoffs that are inevitably required by regulatory activities, and they should seek to reduce the magnitude of compliance costs by identifying and implementing flexible and cost-effective environmental policy instruments.

PD December 1993. **TI** Prices, Regulation, and Energy Conservation. **AU** Jaffe, Adam B.; Stavins, Robert N. **AA** Jaffe: Harvard University and National Bureau of Economic Research. Stavins: Resources for the Future and Harvard University. **SR** Harvard John F. Kennedy School of Government Discussion Paper: R94-1; John F. Kennedy School of Government, 79 John F. Kennedy Street, Cambridge, MA

02138. **PG** 14. **PR** no charge. **JE** O33, Q40. **KW** Technology Adoption. Energy Conservation. Economic Incentives.

AB The ongoing debate about the so-called paradox of gradual diffusion of apparently cost-effective energy-conservation technologies is becoming more relevant in the context of concerns about carbon dioxide emissions and global climate change policy. We incorporate major explanations of the paradox in a model of the decision problem faced by home builders regarding the adoption of specific energy-conserving attributes in new single-family residences. Allowing for unobserved state-specific effects, we find very small dynamic feedback effects from past adoption externalities. We find that builders responded significantly to economic incentives in the form of changes in costs of technology adoption and changes in energy prices. Interestingly, the apparent responsiveness to changes in technology costs is significantly larger than the responsiveness to changes in energy prices, which is inconsistent with standard benefit-cost analysis. Thus, in a model that incorporates major explanations of the observed energy paradox we are left with a new version of the puzzle.

Jagtiani, Julapa

PD June 1993. **TI** Bank Off-Balance Sheet Financial Innovations. **AU** Jagtiani, Julapa; Saunders, Anthony; Udell, Gregory. **AA** Jagtiani: Syracuse University. Saunders and Udell: New York University. **SR** New York University Salomon Brothers Working Paper: S-93-50; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 19. **PR** not available. **JE** G21, G28. **KW** Financial Innovations. Banking. Diffusion Process.

AB A popular explanation for the explosive growth of bank off-balance sheet (OBS) activities in the 1980's is the avoidance of capital adequacy requirements. Several studies have examined this and other motivations behind bank OBS activities, but the results have been mixed. We shed further light on the issue of OBS growth by analyzing the diffusion process of OBS innovations. Our data also allows us to also investigate the impact of important capital adequacy changes (during the 1984-1991 period) on OBS diffusion rates. We find that changes in the capital requirements have had no consistent impact on the speed of diffusion of OBS activities.

Jeffreys, David

TI House Prices, the Supply of Collateral and the Enterprise Economy. **AU** Black, Jane; de Meza, David; Jeffreys, David.

Jordan, Tibor

PD June 1993. **TI** Increasing the Vertex-Connectivity in Directed Graphs. **AA** Eotvos University and University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: C-93802-OR; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 9. **PR** no charge. **JE** C44. **KW** Graph Theory. Splitting Theorem. Vertex Connectivity.

AB Given a k-vertex-connected directed graph G, what is the minimum number m, such that G can be made k + 1-connected by the addition of m new edges? We prove that if a vertex v has in- and out-degree at least k + 1, there exists a splittable pair of edges on v. With the help of this statement, we generalize the basic result of Eswaran and Tarjan, and give lower and upper bounds for m which are equal for k = 0 and differ from each other by at most k otherwise. Furthermore, a polynomial approximation algorithm is given for finding an almost optimal augmenting set.

Joulfaian, David

TI Sticking It Out: Entrepreneurial Survival and Liquidity Constraints. **AU** Holtz-Eakin, Douglas; Joulfaian, David; Rosen, Harvey S.

Kadri, Ali

PD November 1993. **TI** An Equilibrium Model of Labour Transfers in Developing Countries in the Presence of a Third Wage with Application to Data From the West Bank. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 93/05; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** not available. **PR** no charge. **JE** J20, J30, O15. **KW** Developing Countries. Labor. Wages.

AB No abstract available.

Kahan, Marcel

PD November 1993. **TI** Private vs. Public Lending: Evidence from Covenants. **AU** Kahan, Marcel; Tuckman, Bruce. **AA** New York University. **SR** New York University Salomon Brothers Working Paper: S-93-54; 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** not available. **JE** G32. **KW** Private Debt Market. Debt Agreements. Monitoring.

AB This paper compares the terms of 63 privately placed debt agreements with those typically found in public bond indentures. The main results of the analysis are as follows: 1) Private debt agreements require more monitoring and necessitate more frequent renegotiation. This finding does not rely on credit quality differences between the public and private debt markets. Moreover, covenant differences between investment grade and junk issues are less pronounced in the private market than in the public market. 2) Private agreements provide lenders with the means to monitor borrowers more carefully. 3) Private agreements attempt to control intra-claim conflicts, i.e. those arising between holders of the same bond issue. 4) Private agreement payment terms are tailored to suit the asset- liability management needs of lenders by avoiding embedded interest rate options.

Kajii, Atsushi

TI A Cardinal Characterization of the Rubinstein-Safra-Thomson Axiomatic Bargaining Theory. **AU** Grant, Simon; Kajii, Atsushi.

Kambe, Shinsuke

PD December 1991. **TI** Renegotiation in Agency Contracts and Information Acquisition before Renegotiation. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1192; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 21. **PR** no charge. **JE** C78, C73, C72, D82. **KW** Agency. Renegotiation. Verifiability.

AB This article analyzes renegotiation in an agency model where a principal observes a noisy signal about the agent's

effort before the renegotiation. This signal is not verifiable by an outsider or is not contractible in the initial contract. Although any single effort level except the minimal one is not sustainable, the signal is used by the principal to improve efficiency. The agent randomizes his efforts no matter how accurate the signal is but the distribution of the effort levels and the principal's payoff converges to the first best as the signal converges to a completely accurate one.

Kamecke, Ulrich

PD October 1993. TI Dominance or Maximin: How to Solve an English Auction. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-418; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG 17. PR no charge. JE D44. KW Auction Theory. Dominant Strategies. Maximum Criterion.
AB It is widely believed that the English auction is solved after the dominated strategies are eliminated. This opinion is formally confirmed only for one "ascending clock" auction and can not be generalized for most other English auctions. In this paper I show that the formal argument which is usually given in this context can not be derived from the dominance criterion alone, but that it can be used to prove that competitive bidding is the unique maximin strategy of a bidder who believes that his opponents do not play dominated strategies. Since the competitive bids also form a Nash equilibrium this result gives an unfamiliar but strong support for the established solution.

PD November 1993. TI Wage Formation in a Centralized Matching Market. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-422; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG 23. PR no charge. JE J41, J44. KW Medical Interns. Market Failure. Matching Markets.
AB For the last 40 years the market for medical interns has been cleared with the help of a central matching procedure, the NRMP. This mechanism is applied after the wages are determined. So it is natural to ask how such a rationing scheme affects the equilibrium wages in this market. I present a model in which a restriction on the flexibility of the price mechanism explains the market failure. Then I show that the NRMP generates an outcome which establishes some competitive pressure on the wages. Nevertheless, the hospitals are able to extract more surplus from their interns than they could in an ideal competitive equilibrium. This may cause welfare losses if the hospitals can substitute between physicians and interns. I present an example where the deficiencies of the matching market lead to an excessive employment of interns in the most attractive hospitals. This observation sheds new light on the discussion of the efficiency of centrally organized matching procedures.

Kamin, Steven B.

PD November 1993. TI Dollarization in Argentina. AU Kamin, Steven B.; Ericsson, Neil R. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System International Finance Discussion Paper: 460; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. PG 52. PR no charge. JE E40, E41, F41. KW Argentina. Broad Money. Cointegration. Currency Substitution. Money Demand.
AB Argentina became highly "dollarized" during its hyperinflations of 1989 and early 1990. Although inflation has returned to very low rates, a high degree of dollarization has persisted during the early 1990's, counter to what the currency substitution hypothesis predicts. This paper provides new evidence that explains the continued dollarization of the Argentine economy. First, we develop a new measure of dollar currency circulating in foreign countries. This measure improves our ability to analyze dollarization and currency substitution by distinguishing between dollar currency holdings and dollar deposits, and thereby represents an important advance over previous studies that focused on dollar deposit holdings only. Empirically, these components of dollar assets for Argentina have responded differently to recent macroeconomic shocks. Second, cointegration analysis of peso money demand in Argentina finds a negative "ratchet effect" from inflation on the demand for pesos. The reduction in peso money demand attributable to the ratchet effect is similar in magnitude to the estimated stock of all dollar assets held domestically by Argentine residents, consistent with the hypothesis of irreversible dollarization.

Kane, Thomas J.

PD February 1993. TI Labor Market Returns to Two- and Four-Year College: Is a Credit a Credit and and Do Degrees Matter? AU Kane, Thomas J.; Rouse, Cecilia Elena. AA Kane: Harvard University. Rouse: Princeton University. SR John F. Kennedy School of Government Discussion Paper: R93-38; Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138. PG 22. PR no charge. JE I21, J31. KW Community Colleges. Wage Differentials. Education.
AB Despite their growing importance as a labor market institution providing vocational training, little is known about the returns to the community college education. We study the distinct returns to two-year and four-year college attendance and degree completion. Controlling for family income and measured ability wage, wage differentials for both two-year and four-year college credits are positive and of similar magnitude. We find that the average two-year and four-year college student earned roughly 5-7% more than similar high school graduates for every year of credits completed. Average bachelor and associate degree recipients did not earn significantly more than drop-outs with similar numbers of college credits, suggesting that the credentialling effects of these degree are small. In addition to controlling for family background and ability measures, we pursue two IV strategies to identify the distinct effects of measurement error in the schooling variable and selection bias.

TI Financing Apprenticeship Training: Evidence from Germany. AU Harhoff, Dietmar; Kane, Thomas J.

TI Financing Apprenticeship Training: Evidence From Germany. AU Harhoff, Dietmar; Kane, Thomas J.

Kaplow, Louis

PD December 1993. TI Should the Government's Allocation Branch be Concerned About the Distortionary Cost of Taxation and Distributive Effects? AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4566; National Bureau of Economic Research, 1050 Massachusetts Avenue,

Cambridge, MA 02138. **PG** 24. **PR** $5.00. **JE** H20, H22, E62. **KW** Taxation. Public Goods. Budget Balance. Distortionary Taxes.
AB Does taxation for public goods generally involve a distortionary cost? Are Pigouvian taxes desirable because they raise revenue without having to resort to distortionary taxes? Should decisions concerning public goods or Pigouvian taxes depend on whether their incidence is regressive? The answer to these questions may be negative, contrary to conventional wisdom, if one considers a different and arguably more natural method of achieving budget balance than is typically assumed.

Kapur, Sandeep
TI Liquidity and Financial Intermediation. **AU** Dutta, Jayasri; Kapur, Sandeep.

Karayannis, Marios
TI Tax Evasion and the Allocation of Capital. **AU** Fullerton, Don; Karayannis, Marios.

Karp, Larry S.
PD September 1993. **TI** Why Industrial Policies Fail: Limited Commitment. **AU** Karp, Larry S.; Perloff, Jeffrey M. **AA** University of California, Berkeley. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 533R; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 23. **PR** $9.25. **JE** H21, F12. **KW** Industrial Policy. Export Marketing. Strategic Trade Policy.
AB The strategic effects of subsidies on output and subsidies on investment differ substantially in dynamic models where a government's commitment ability is limited. Output subsidies remain effective even as the period of commitment vanishes, but investment subsidies may become completely ineffective. This difference has been obscured because most existing models of strategic trade policy are static.

PD September 1993. **TI** The Failure of Strategic Industrial Policies Due to the Manipulation by Firms. **AU** Karp, Larry S.; Perloff, Jeffrey M. **AA** University of California, Berkeley. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 584R; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 20. **PR** $7.75. **JE** F12, E22, H23. **KW** Export Subsidy. Strategic Industrial Policy.
AB The home government announces an export subsidy before a home firm and a foreign rival compete in a third market. Anticipating the subsidy, either home or foreign firms may increase their output-cost-savings investments. Anticipatory investments in either country may cause domestic welfare to fall below its free market level. Similarly, if both home and foreign governments use strategic industrial policies, welfare may fall in one or both countries.

Kastner, Steffen
TI A Framework for Assessing Fiscal Sustainability and External Viability with an Application to India. **AU** Parker, Karen; Kastner, Steffen.

Kealy, Mary Jo
TI Benefits Transfer in a Random Utility Model of Recreation. **AU** Parsons, George R.; Kealy, Mary Jo.

Kiefer, Nicholas M.
TI Local Cuts and Separate Inference. **AU** Christensen, Bent Jesper; Kiefer, Nicholas M.

King, Maxwell L.
PD October 1993. **TI** Hypothesis Testing in the Presence of Nuisance Parameters. **AA** Monash University. **SR** Monash Department of Econometrics Research Working Paper: 13/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 17. **PR** no charge. **JE** C12, C11, C15. **KW** Bayesian Methods. Marginal Likelihood. Linear Regression.
AB How to deal with nuisance parameters is an important problem in econometrics because of the non-experimental nature of economic data. This paper suggests a new approach to dealing with such parameters in the context of hypothesis testing. It involves calculating p-values conditional on values for key nuisance parameters and then taking a weighted average of these values with the weights reflecting the likelihood or posterior probabilities of these values being true. Two specific applications are discussed. These are testing linear regression coefficients in the presence of first-order autoregressive (AR(1)) disturbances and testing for AR(1) disturbances in the dynamic linear regression model. For the former testing problem, a Monte Carlo experiment demonstrates that the new procedure provides more accurate inferences than accepted conventional procedures.

TI Marginal Likelihood Based Tests of Regression Disturbances. **AU** Ara, Ismat; King, Maxwell L.

TI Marginal Likelihood Score-Based Tests of Regression Disturbances in the Presence of Nuisance Parameters. **AU** Rahman, Shahidur; King, Maxwell L.

TI Pre-Test Strategies for Time-Series Forecasting in the Linear Regression Model. **AU** Rankin, Mei Leng; King, Maxwell L.

Kiviet, Jan F.
PD August 1993. **TI** Bias Assessment and Reduction in Linear Error-Correction Models. **AU** Kiviet, Jan F.; Phillips, Garry D. A. **AA** Kiviet: University of Amsterdam. Phillips: University of Bristol and University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 92/07; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** 34. **PR** no charge. **JE** C22, C32. **KW** Dynamic Regression Models. Error Correction Models. Small Sample Bias.
AB In dynamic models with white-noise disturbances and an arbitrary number of lagged-dependent and independent explanatory variables the ordinary least-squares estimator of the coefficients is biased in finite samples. It is shown how this small sample bias can be approximated through both small disturbance and large sample asymptotics when the independent regressors are strongly exogenous. Results for the standard ARMAX(p,0,k) model are obtained first, and then for such models under linear constraints. Finally we derive approximations for the coefficient bias in linearly transformed

and restricted models such as the empirically highly relevant linear error-correction model. These approximations are then used to construct corrected estimators for the parameters of interest in higher-order dynamic regression models. By simulating two empirical models these corrected estimators are shown to be much less biased whereas they are often more efficient than ordinary least-squares.

Kneafsey, Kevin P.
TI Forecasting Volatility in Commodity Markets. AU Kroner, Kenneth F.; Kneafsey, Kevin P.; Claessens, Stijn.

Korosi, Gabor
PD October 1993. TI Aggregation and the Long Run Behaviour of Economic Time Series. AU Korosi, Gabor; Lovrics, Laszlo; Matyas, Laszlo. AA Korosi: La Trobe University. Lovrics: Budapest University. Matyas: Monash University. SR Monash Department of Econometrics Research Working Paper: 12/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 6. PR no charge. JE C43, C12, C13, C15, C22. KW Cointegration. Unit Root. Representative Agent.
AB The aggregation problem is a well-known difficulty in macroeconometric modeling. It is frequently assumed in these models that the behavior of economic agents is uniform. Thus the behavior of a single agent characterizes the aggregate behavior of the agents (representative agent). However, there may always be some "outliers," some uncharacteristically behaving agents. Such outliers may well determine the time dynamics of the aggregate time series. The paper presents different Monte Carlo experiments to demonstrate this feature. This phenomenon may have an utmost significance in models assuming the cointegration of the variables.

Kovalyov, M. Y.
PD not available. TI Single Machine Scheduling with Set-Ups to Minimize the Number of Late Items: Algorithms, Complexity and Approximation. AU Kovalyov, M. Y.; Potts, C. N.; Van Wassenhove, L. N. AA Kovalyov: Belarus Academy of Sciences. Potts: University of Southampton. Van Wassenhove: INSEAD. SR INSEAD Working Papers: 93/82/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 13. PR not available. JE C61. KW Single Machine Scheduling. Approximation Algorithms.
AB In the problem of scheduling a single machine to minimize the number of late items, there are N jobs each containing a given number of identical items. Each job may be partitioned into sublots that contain contiguously scheduled items. A set-up time is required before the machine processes the first item of a sublot. Each job has a due date that applies to all of its items, and the objective is to find a schedule which minimizes the number of late items. The problem is shown to be (binary) NP-hard, even for the case of unit processing times and a common due date, although it is pseudopolynomially solvable by dynamic programming. Some special cases are shown to be polynomially solvable. Also, a family of approximation algorithms is presented.

Krasnoselsky, Alexander
TI Privatisation and the Development of Industrial Enterprises in Russia. AU Doyle, Chris; Krasnoselsky, Alexander.

TI Microeconomic Reform and Transition in Russia: Price Liberalisation. AU Doyle, Chris; Krasnoselsky, Alexander.

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

TI Program Trading, Non-Program Trading and Market Volatility. AU Hogan, Kedreth C.; Kroner, Kenneth F.; Sultan, Jahangir.

PD June 1993. TI Forecasting Volatility in Commodity Markets. AU Kroner, Kenneth F.; Kneafsey, Kevin P.; Claessens, Stijn. AA Kroner and Kneafsey: University of Arizona. Claessens: World Bank. SR University of Arizona Economics Working Paper: 93-3; Department of Economics, Bldg #23, University of Arizona, Tucson AZ 85721. PG 15. PR $2 Canada and U.S.; $3 Overseas by air. JE C22, G13, D84. KW Price Volatility. Market Expectations. Time Series Forecasts.
AB This paper uses recent advances in time series modeling to derive long- horizon forecasts of commodity price volatility which incorporate investors' expectations of volatility. Our results are promising. We compare several different forecasts of commodity price volatility, which we divide into three categories: (1) forecasts using only expectations derived from options prices; (2) forecasts using only time series modeling; and (3) forecasts which combine market expectations and time series methods. The forecasts in (1) and (2) are used extensively in the literature, while the forecasts in (3) are new in this paper. On comparing these different forecasts, we find that our proposed forecasts from category (3) outperform both market expectations forecasts and time series forecasts. This result holds both in and out of sample for virtually all commodities considered.

TI Arbitrage, Cointegration and Testing for Simple Efficiency in Financial Markets. AU Brenner, Robin J.; Kroner, Kenneth F.

Kroon, L. G.
PD not available. TI Exact and Approximation Algorithms for the Tactical Fixed Interval Scheduling Problem. AU Kroon, L. G.; Salomon, M.; Van Wassenhove, L. N. AA Kroon and Salomon: Erasmus University. Van Wassenhove: INSEAD. SR INSEAD Working Papers: 94/04/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 18. PR not available. JE C61, C63. KW Scheduling Problem. Computational Complexity.
AB The Tactical Fixed Interval Scheduling Problem (TFISP) is the problem of determining the minimum number of parallel non-identical machines, such that a feasible schedule exists for a given set of jobs. In TFISP each job must carried out in a prespecified time interval and belongs to a specific job class. The problem is complicated by the restrictions that (i) each machine can handle one job at a time only, (ii) each machine can handle jobs from a subset of the job classes only, and (iii) preemption is not allowed. In this paper we discuss the occurrence of TFISP in practice, we analyze the computational complexity of TFISP, and we present exact and approximation algorithms for solving TFISP. The paper is concluded with a computational study.

Krueger, Alan B.
TI Split Sample Instrumental Variables. **AU** Angrist, Joshua; Krueger, Alan B.

Krugman, Paul
PD December 1993. **TI** Integration, Specialization, and Adjustment. **AU** Krugman, Paul; Venables, Anthony. **AA** Krugman: Massachusetts Institute of Technology and National Bureau of Economic Research. Venables: London School of Economics. **SR** National Bureau of Economic Research Working Paper: 4559; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** $5.00. **JE** F15, R30. **KW** Geographic Localization. European Integration. Industry Location.
AB In the United States, many industries have a Silicon Valley-type geographic localization. In Europe, these same industries often have four or more major centers of production. This difference is presumably the result of the formal and informal trade barriers that have divided the European market. With the growing integration of that market, however, there is the possibility that Europe will develop an American-style economic geography. This paper uses a theoretical model of industrial localization to demonstrate this possibility, and to show the possible transition costs associated with this shift.

TI Technology and the Life Cycle of Cities. **AU** Brezis, Elise S.; Krugman, Paul.

TI Immigration, Investment, and Real Wages. **AU** Brezis, Elise S.; Krugman, Paul.

Kruse, Douglas L.
PD November 1993. **TI** Does Profit Sharing Affect Productivity? **AA** Rutgers University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4542; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 53. **PR** $5.00. **JE** L10, J30. **KW** Profit Sharing. Productivity. Profitability.
AB Existing research tends to show that profit-sharing plans for employees are associated with higher company productivity and profitability, though the causality and mechanisms are unclear. This study uses new data from a survey of 500 U.S. public companies, and panel data on corporate performance, to examine the relationship between productivity measures and the adoption and presence of profit sharing. Controlling for a variety of influences on productivity, profit sharing adoption is found to be associated with average productivity increases of 4-5%, with no subsequent positive or negative trend. The productivity increase is dispersed; it is found to be larger for small companies and for cash plans, and to be unaffected when controlling for personnel policies which may affect productivity. There is, however, no evidence on the mechanisms through which profit sharing may affect productivity, since there are no strong interactions with information-sharing or other policies in affecting productivity.

La Porta, Rafael
TI What Moves the Discount on Country Equity Funds? **AU** Hardouvelis, Gikas A.; Wizman, Thierry A.; La Porta, Rafael.

Labbe, Martine
PD October 1993. **TI** Location on Networks. **AU** Labbe, Martine; Peeters, Dominique; Thisse, Jacques-Francois. **AA** Labbe: FNRS and Universite Libre de Bruxelles. Peeters: Universite Catholique de Louvain. Thisse: Universite de Paris I-Sorbonne and CERAS-ENPC. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9340; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 97. **PR** not available. **JE** C44, C61. **KW** Facility Location Analysis. Minimax Problem.
AB Facility location analysis deals with the problem of locating one or several facilities with regard to existing facilities and clients in order to optimize some economic criterion. In this survey, we consider specifically the problem of selecting one or several points of a network in order to optimize a function which is distance-dependent with respect to given points of a network. Minimum and minimax problems, where the objectives are to minimize respectly the sum or the maximum of different functions of distances, are reviewed. We also discuss models integrating more economic variables, such as prices, and putting more emphasis on the decision making context, particularly the competitive location models. Discrete models, for which the set of possible locations is finite and which have received the most attention of practitioners, are presented as well.

Lackford, James
TI The Effect of Fraternity and Sorority Membership on Undergraduate Academic Performance. **AU** Grubb, Farley; Lackford, James.

Lakonishok, J.
TI Market Underreaction to Open Market Share Repurchases. **AU** Ikenberry, D.; Lakonishok, J.; Vermaelen, T.

Lal, Deepak
PD July 1993. **TI** Trade Blocs and Multilateral Free Trade. **AU** Lal, Deepak; Coleman, James S. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 697; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 7. **PR** $5.00. **JE** F15, F02, F01. **KW** Regional Trading Blocs. Imperialism.
AB This paper takes a cool look at the current movement towards regional trading blocs. It argues this is similar to the unraveling of the first great liberal international economic order of the 19th century, and finds that there is a particular danger of a new form of imperialism, this time to promote Greenery.

PD December 1993. **TI** Participation, Markets and Democracy. **AU** Lal, Deepak; Coleman, James S. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 705; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 34. **PR** $5.00. **JE** D72, D73, O19. **KW** Popular Participation. World Bank. Democracy.
AB This paper examines the role of popular participation, in particular through non-governmental organizations (NGO's) in both promoting democracy (seen as essential for better governance) and the maintenance of a market economy. Making a crucial distinction between the forms and characteristics of good government, it finds no empirical

relationship between the form of government and successful development. It argues that while democracy promotes liberty it may not promote opulence, while mass participation through pressure groups may harm rather than aid the attainment of both opulence and liberty. Finally, it examines the role NGO's should play in World Bank operations, and finds there is no presumption one way or another that this is desirable, and argues that the only test is the contingent one of cost-effectiveness.

PD December 1993. TI India and China: Contrasts in Economic Liberalization? AU Lal, Deepak; Coleman, James S. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 706; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 31. PR $5.00. JE O53, P27, P41, P52, F40. KW Economic Reform. Historical Perspective.
AB The paper compares the recent economic liberalization in China and India in historical and cultural perspective. It finds greater similarities and differences in the initial conditions under which the reforms were begun, their motivation as well as in their extent and results. It also speculates on the likely course of reform in the future, which in both countries require the dismantling of loss-making state enterprises. The political uncertainties are underlined, though it is argued that Indian reforms may now be irreversible, unlike China, because of a more marked change in cultural attitudes, which has created a greater popular consensus for markets over mandarins.

PD December 1993. TI Poverty and Development. AU Lal, Deepak; Coleman, James S. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 707; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 31. PR $5.00. JE I32, O15, N30. KW Mass Poverty. Economic Growth.
AB The paper distinguishes three types of poverty -- mass poverty, conjunctural poverty and destitution -- from the historical record, and how they have been dealt with. It emphasizes that the only cure for mass poverty is modern economic growth. It outlines the ethical underpinnings of two different perspectives for dealing with problems of destitution and conjunctural poverty. The final two parts of the paper survey the empirical evidence on the success of the efficient labor-intensive growth, and the evidence from the Lal-Myint comparative study of the results from the creation of welfare states in some Third World countries -- the so-called direct route to poverty alleviation.

Lambelet, Jean-Christian
PD April 1993. TI Conjoncture et Finances Publiques. AA Universite de Lausanne. SR Universite de Lausanne, Cahiers de Recherches Economiques: 9302; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 22. PR no charge. JE E61, H60. KW Public Finance. National Debt. Deficit.
AB The paper includes an analysis of the current conjonctural and budgetary situation in Switzerland, a set of macroeconometric simulations on the likely impact of a stimulating package aimed at the construction industry, and a

set of eight policy proposals to improve the analysis and operation of fiscal policy in Switzerland.

PD November 1993. TI Des Finances Publiques Saines, un Avantage Comparatif Important. AA Universite de Lausanne. SR Universite de Lausanne, Cahiers de Recherches Economiques: 9309; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG 20. PR no charge. JE E61, H60. KW Public Finance. National Debt. Deficit.
AB The paper has four parts. In a first part, the recent evolution of the budgetary situation in Switzerland is analyzed at all levels of government (federal, cantonal, local). In a second part, the question is discussed as to whether the Swiss economy ought to be stimulated via public expenditures and a program of public works. A third part looks at ways to reestablish the overall budgetary balance while a few conclusions make up a fourth and final part.

Landskroner, Yoram
TI Implied Foreign Exchange Rates Using Option Prices.
AU Brenner, Menachem; Landskroner, Yoram.

Lant, Theresa K.
PD December 1992. TI Simulation Games as a Research Method for Studying Strategic Decision Making: The Case of MARKSTRAT. AU Lant, Theresa K.; Montgomery, David B. AA Lant: New York University. Montgomery: Stanford University. SR Stanford Graduate School of Business Research Paper: 1242; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. PG not available. PR no charge. JE B40, B41. KW Simulation Games. Decision Making Research. Strategic Management.
AB Strategic management theorists face a dilemma in choosing methods for studying strategy formulation and strategic decision making. The choice of a research method involves inherent trade-offs of generalizability, control, and realism. This paper explores the methodological implications of using simulation games as a research setting. The trade-offs of this methodology are discussed in the context of a particular simulation game, the MARKSTRAT marketing strategy game.

Lascher, Edward L., Jr
PD January 1994. TI Assessing Legislative Deliberation. AA Harvard University. SR Harvard John F. Kennedy School of Government Discussion Paper: R94-6; John F. Kennedy School of Government, 79 John F. Kennedy Street, Cambridge, MA 02138. PG 75. PR no charge. JE D72, D73. KW Legislature. Deliberative Decision Making.
AB Recent scholarship has emphasized the importance of deliberation for democratic politics generally and legislative politics specifically. Yet there are a number of conceptual and empirical problems with the way deliberative decision-making processes have been characterized. In this paper I address a number of these issues, drawing on a case study of the Rhode Island state legislature's deliberation about automobile insurance reform. In particular, I argue that inadequate attention has been paid to the quality of deliberation, and provide a method of assessing deliberation quality. I also contend that a favorable set of circumstances may be required to obtain the beneficial consequences often claimed on behalf of deliberative processes.

Lechene, Valerie

TI Comparing Low Incomes in France and the United Kingdom: Evidence From Household Expenditure Surveys. **AU** Atkinson, A. B.; Gardiner, Karen; Lechene, Valerie; Sutherland, Holly.

Leeper, Eric M.

TI When Do Long-Run Identifying Restrictions Give Reliable Results? **AU** Faust, Jon; Leeper, Eric M.

Lepskii, Oleg V.

PD July 1993. **TI** On Asymptotically Exact Testing of Nonparametric Hypotheses. **AA** Universite Catholique de Louvain and Institute for System Analysis, Russian Academy of Sciences. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9329; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 6. **PR** not available. **JE** C12, C14. **KW** Nonparametric Hypotheses. Hypothesis Testing.
AB This paper deals with testing of nonparametric hypotheses when the model of observation is unknown function sigma(1) plus a Gaussian White Noise with a small diffusion epsilon > 0. It is required to distinguish the simple hypothesis H sub 0: sigma(1) in SIGMA sub epsilon where SIGMA sub epsilon is a certain class of smooth functions, separated from zero by the value C psi(epsilon) that is described by some function (the function psi(epsilon) and the constant C depend on the smoothness parameter). We consider two kinds of such functionals namely functional that is a uniform norm on [0,1], and the functional that is the value of function at a given point belonging to [0,1]. Using the minimax approach, we find the exact value of constant C for the two problems in situation of Holder classes of functions.

Leybourne, S. J.

PD September 1993. **TI** Trend Stationarity in Time Series. **AU** Leybourne, S. J.; McCabe, B. P. M.; Tremayne, A. R. **AA** Leybourne: University of Nottingham. McCabe: Monash University and University of British Columbia. Tremayne: University of Sydney. **SR** Monash Department of Econometrics Research Working Paper: 9/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 7. **PR** no charge. **JE** C51, C52, C22. **KW** Unit Roots. Macroeconomic Time Series. Identification Problem.
AB There is an identifiability problem in the limit with the widely used trend stationary model in time series econometrics. A plausible modification to the usual model specification, which preserves the distinction between trend and difference stationarity, is proposed to overcome this difficulty.

Lian, Peng

TI Love and Hate: State and Non-State Firms in Transition Economies. **AU** Wei, Shang-Jin; Lian, Peng.

Lichtenberg, Frank R.

PD November 1993. **TI** The Output Contributions of Computer Equipment and Personnel: A Firm-Level Analysis. **AA** Columbia Business School and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4540; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 33. **PR** $5.00. **JE** E22, O32, J24.

KW Information Systems. Computers.
AB This paper examines the output contributions of capital and labor deployed in information systems (IS) at the firm level during the period 1988-91 throughout the business sector, using two different sources of data on these inputs. Our production function estimates suggest that there are substantial excess returns to both IS capital and IS labor, although the size and significance of the excess returns to IS capital is larger. Computer capital and labor jointly contribute, or account for, about 21 percent of output, although only about 10% of both capital and labor income accrue to IS factors. Although IS employees accounted for a very small share of total employment by 1986, IS employment growth is estimated to have made a larger contribution to 1976-86 output growth than non-IS employment, due to the very rapid growth (16% per annum) of IS employment. The estimated marginal rate of substitution (MRS) between IS and non-IS employees, evaluated at the sample mean, is 6: one IS employee can be substituted for six non-IS employees without affecting output.

Lim, Guay C.

PD March 1994. **TI** The Dynamics of the Real Exchange Rate and Current Account in a Small Open Economy: Australia. **AU** Lim, Guay C.; Stein, Jerome L. **AA** Australia University and Brown University. **SR** Brown University Department of Economics Working Paper: 94-8; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 36. **PR** no charge. **JE** F31, F32, F34, F41, F43. **KW** Foreign Debt. Capital Movements. Interest Rates.
AB The aims of this chapter are: to identify the fundamental determinants of the equilibrium real exchange rate (NATREX), examine whether the actual rate converges to the NATREX, explain the evolution of the foreign debt and explain when it should or should not be a cause for concern. Part B discusses what we know about the Australian exchange rates and associated fundamentals. What theories are or are not consistent with the evidence? We draw upon the existing studies, primarily that of the Reserve Bank of Australia as well as on our own calculations. Part C summarizes the work of Edwards and Balassa, so that the reader can place our work into the context of the literature.

Lin, Wen-Ling

TI Price Volatility and Volume Spillovers Between the Tokyo and New York Stock Markets. **AU** Ito, Takatoshi; Lin, Wen-Ling.

Link, Charles R.

TI Panel Data: Controlling for Individual Effects in Models of Learning. **AU** Gilby, Elaine M.; Link, Charles R.; Mulligan, James G.

Linton, Oliver B.

PD December 1993. **TI** Second Order Approximation in the Partially Linear Regression Model. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1065; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 25. **PR** no charge. **JE** C13, C14, C15. **KW** Second Order Properties. Standard Error Estimator. Semiparametric Least Squares.
AB We examine the second order properties of various

quantities of interest in the partially linear regression model. We obtain a stochastic expansion, for the standardized semiparametric least squares estimator, a standard error estimator, and a studentized statistic. We use the second order expansions to correct the standard error estimates for second order effects, and to define a method of bandwidth choice. A monte carlo experiment provides favorable evidence on our method of bandwidth choice.

PD   March 1994. TI   Applied Nonparametric Methods. AU   Linton, Oliver B.; Hardle, Wolfgang. AA   Linton: Yale University. Hardle: Humboldt Universitat. SR   Yale Cowles Foundation Discussion Paper: 1069; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. PG   35. PR   no charge. JE   C14, C13. KW   Nonparametric Estimation. Kernel Estimators. Bandwidth.

AB   We review different approaches to nonparametric density and regression estimation. Kernel estimators are motivated from local averaging and solving ill-posed problems. Kernel estimators are compared to k-NN estimators, orthogonal series and splines. Pointwise and uniform confidence bands are described, and the choice of smoothing parameter is discussed. Finally, the method is applied to nonparametric prediction of time series and to semiparametric estimation.

Lipsey, Robert E.

PD   December 1993. TI   The High Cost of Eating: Agricultural Protection and International Differences in Consumer Food Prices. AU   Lipsey, Robert E.; Swedenborg, Birgitta. AA   Lipsey: CUNY and National Bureau of Economic Research. Swedenborg: Studieforbundet Naringsliv och Samhalle. SR   National Bureau of Economic Research Working Paper: 4555; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   27. PR $5.00. JE   F13, E30, Q17, Q18, Q11. KW   Food Prices. Agricultural Protection. Trade Policy.

AB   Prices of food vary greatly among the developed countries, and some countries' food prices have been consistently far above the OECD average. The main explanation for persistently high food price levels is the extent of protection of agricultural products at the farm level, partly explainable by the desire to retain agriculture in the face of poor growing conditions. A second important influence for some countries is a high level of VAT on food. A third is deviations of aggregate country price levels from the levels that would be predicted from their per capita incomes, presumably because of omitted characteristics of the countries' economies, such as, possibly, inefficient or monopolistic service sectors. In addition, there are occasional episodes of high price levels due to temporary factors affecting exchange rates. The issues raised by these large food price differences are relevant to understanding real income differences among countries. They are also relevant to the current round of GATT negotiations, in which agricultural protection is a frequent stumbling block, and to the European Community's hopes of increasing competitive pressures through the creation of a freer internal market.

Lismont, Luc

PD   October 1993. TI   Belief Closure: A Semantics of Common Knowledge for Modal Propositional Logic. AU   Lismont, Luc; Mongin, Philippe. AA   Lismont: GREQUE, Marseilles. Mongin: Centre National de la Recherche Scientifique and Universite Catholique de Louvain.

SR   Universite Catholique de Louvain CORE Discussion Paper: 9339; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG   24. PR   not available. JE   D81. KW   Common Belief. Closed Belief. Neighborhood Semantics.

AB   The paper axiomatizes individual and common belief by means of modal propositional logic systems of varying strength. The weakest system of all just requires monotonicity of individual belief on top of the axiom and rules of common belief. It is proved to be sound and complete with respect to a specially devised variant of neighborhood semantics. The remaining systems include a K-system for each individual. They are shown to be sound and complete with respect to suitable variants of Kripke semantics. The specific features of either neighborhood or Kripke semantics in this paper relate to the validation clause for common belief. Informally, we define a proposition to be belief closed if everybody believes it at every world where it is true, and we define a proposition to be common belief at a world if it is implied by a belief closed proposition that everybody believes at that particular world. This " fixed-point" or "circular" account of common belief is seen to imply the more standard "iterate" account in terms of countably infinite sequences of share beliefs.

Liu, Lihong

TI   Government Finance in a Model of Currency Substitution. AU   Sibert, Anne; Liu, Lihong.

Lockwood, Ben

PD   November 1992. TI   Multi-Firm Regulation Without Lump-Sum Taxation. AA   University of Exeter. SR   University of Exeter Department of Economics Discussion Paper: 92/06; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG   29. PR   no charge. JE   L51. KW   Multi-Firm Regulation. Multi-Agent Problems. Principal-Agent.

AB   This paper considers a problem of multi-firm regulation where the regulator cannot make monetary transfers to or from firms. Otherwise, the set-up is standard; firms charging two-part tariffs sell in separate markets, and marginal costs are private information. If marginal costs are highly correlated, then the regulator can achieve the first-best, but that when the correlation is low, this regulatory policy involves very large fixed fees in some states, violating the constraint that the representative consumer must wish to participate in the market in all states (consumer rationality). I study the second-best optimal regulatory scheme that respects the consumer rationality constraint, and show that it has some non-standard properties; (i) the regulator may wish to drive informational rents down to zero even at the cost of some price distortion, (ii) consumer surplus may be zero in some states, and (iii) the price that one firm charges is decreasing in the other's cost.

PD   November 1993. TI   The Equivalence Between Destination and Restricted Origin Tax Regimes. AU   Lockwood, Ben; de Meza, David; Myles, Gareth D. AA   University of Exter. SR   University of Exeter Department of Economics Discussion Paper: 93/06; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG   not available. PR   no charge. JE   D43, H20. KW   Origin. Destination. Taxation. Equivalence.

AB   A series of equivalence results are established which

show that a switch from a destination regime of commodity taxation to an origin regime has no real effects. These significantly generalize those in the existing literature. Assuming uniformity of taxes within each country, equivalence applies: (i) in a general competitive economy with an arbitrary (finite) number of goods and factors of production, arbitrary factor taxes and arbitrary transport costs; (iii) in an imperfectly competitive economy with any form of imperfect competition and with transport costs and (iv) in monetary economies where there is some price rigidity (e.g. nominal wage rigidity) as long as the exchange rate is flexible. Conditions under which non-equivalence will apply are also identified and discussed.

Longstaff, Francis A.

PD November 1993. **TI** Optimal Call Policy for Corporate Bonds. **AU** Longstaff, Francis A.; Tuckman, Bruce. **AA** Longstaff: University of California, Los Angeles. Tuckman: New York University. **SR** New York University Salomon Brothers Working Paper: S-93-55; 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** 9. **PR** not available. **JE** G32. **KW** Corporate Finance. Callable Bonds.
AB An often-cited result in corporate finance is that a firm should call a bond as soon as its market price equals its call price. We show that this policy need not be optimal when there is more than one bond issue outstanding and when the capital structure of the firm is affected by the refunding. Furthermore, the value of a callable bond can exceed its call price when the firm follows the optimal call policy. These results provide a potential explanation for the long-standing puzzle of why firms delay calling their debt and why callable bond values often exceed their respective call prices.

Lovrics, Laszlo

TI Aggregation and the Long Run Behaviour of Economic Time Series. **AU** Korosi, Gabor; Lovrics, Laszlo; Matyas, Laszlo.

Lynch, Lisa M.

TI Re-employment Probabilities Over the Business Cycle. **AU** Imbens, Guido.; Lynch, Lisa M.

Madrian, Brigitte C.

TI Health Insurance and Early Retirement: Evidence from the Availability of Continuation Coverage. **AU** Gruber, Jonathan; Madrian, Brigitte C.

Mailath, George J.

PD December 1993. **TI** A Positive Analysis of Bank Closure. **AU** Mailath, George J.; Mester, Loretta J. **AA** Mailath: University of Pennsylvania. Mester: Federal Reserve Bank of Philadelphia and University of Pennsylvania. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 94-2; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 25. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G21, G28. **KW** Banking Regulation. Bank Closure. Depository Institutions.
AB This paper investigates the incentives of a regulator to close depository institutions, recognizing that an institution's risk-taking will be influenced by the regulator's policy regarding bank closure and that there are opportunity costs in closing banks arising from their intermediation function. The regulator focuses not on the current portfolio of the bank, but on the bank's future portfolio. Even if the regulator seeks to maximize welfare, the first best is not obtainable because the regulator is unable to credibly commit to certain policies regarding closure.

Malcomson, James M.

TI Rewarding Performance by Promotion to a Different Job. **AU** Fairburn, James A.; Malcomson, James M.

Marchand, Maurice

TI Optimal Taxation and Provision of Public Goods with Non Linear Income and Linear Commodity Taxes in a Two Class Economy. **AU** Nava, Mario; Marchand, Maurice; Schroyen, Fred.

Marco, Giancarlo

TI Corporate Distress Diagnosis: Comparisons Using Linear Discriminant Analysis and Neural Networks (The Italian Experience). **AU** Altman, Edward I.; Marco, Giancarlo; Varetto, Franco.

Marin, Dalia

PD December 1993. **TI** Tying Trade Flows: A Theory of Countertrade. **AU** Marin, Dalia; Schnitzer, Monika. **AA** Marin: University of Vienna. Schnitzer: University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-396; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 30. **PR** no charge. **JE** F13, F34, L14. **KW** Countertrade. Bilateralism. Moral Hazard.
AB A countertrade contract ties an export to an import. Usually, countertrade is seen as a form of bilateralism and reciprocity and thus as an inefficient form of international exchange. In this paper we argue that there are circumstances where the tying of two technologically unrelated trade flows may be efficiency enhancing. We show that countertrade can be seen as an efficient institution that solves moral hazard problems and restores creditworthiness of countries with large outstanding debt. We test the implications of our model using a sample of 230 countertrade contracts.

Marjit, Sugata

PD March 1993. **TI** Cooperation in R and D: The Case of Patent Infringement Agreements. **AA** Jadavpur University. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-419; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 12. **PR** no charge. **JE** O32, O34, D45, L13. **KW** Oligopoly. Licensing. Imperfect Markets.
AB This paper is an attempt to provide strategic rationale behind patent infringement agreements (PIA). We interpret such agreements as yet another form of cooperation in a non-cooperative environment. If the infringement probability is not "too" low, firms would have incentive to sign a PIA sacrificing the right to punish the offender. In a simple Cournot-Nash model with linear demand, we show that the infringement probability as low as near 1/5 could induce PIA.

Matyas, Laszlo

PD September 1993. **TI** A Comparative Analysis of Different Monte Carlo Methods. **AU** Matyas, Laszlo; Harris, Mark N. **AA** Monash University. **SR** Monash Department of Econometrics Research Working Paper: 10/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 6. **PR** no charge. **JE** C15, C12, C13. **KW** Monte Carlo Experiment. Simulation. Estimation.
AB The purpose of this paper is to investigate how different ways to generate data in a Monte Carlo experiment can influence the outcome of an analysis.

TI Aggregation and the Long Run Behaviour of Economic Time Series. **AU** Korosi, Gabor; Lovrics, Laszlo; Matyas, Laszlo.

Matzkin, Rosa

TI Walrasian Comparative Statics. **AU** Brown, Donald J.; Matzkin, Rosa.

McCabe, B. P. M.

TI Trend Stationarity in Time Series. **AU** Leybourne, S. J.; McCabe, B. P. M.; Tremayne, A. R.

McGarry, Kathleen

TI The Relationship Between Job Characteristics and Retirement. **AU** Hurd, Michael; McGarry, Kathleen.

TI Evaluation of Subjective Probability Distributions in the HRS. **AU** Hurd, Michael; McGarry, Kathleen.

McKibbin, Warwick J.

TI A Comparison of Some Basic Monetary Policy Regimes: Implications of Different Degrees of Instrument Adjustment and Wage Persistence. **AU** Henderson, Dale W.; McKibbin, Warwick J.

McLaren, Keith R.

PD September 1993. **TI** A Simple Nested Test of AIDS. **AU** McLaren, Keith R.; Fry, Jane M.; Fry, Tim R. L. **AA** Monash University. **SR** Monash Department of Econometrics Research Working Paper: 11/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 8. **PR** no charge. **JE** D12, C51, C31. **KW** Almost Ideal Demand. MAIDS. Stochastic Specification.
AB The MPIGLOG specification of an indirect utility function gives rise to Cooper and McLaren's (1992) Modified AIDS (MAIDS) specification, which nests AIDS. Following the "combined" approach outlined by Fry, Fry and McLaren (1993), we transform our deterministic equations to logratio form for estimation. This procedure not only restricts the shares implied by the model to the unit simplex, but also provides a transparent representation of the restriction implied by AIDS. We estimate MAIDS (with and without the AIDS restriction imposed) using the "combined" approach and proceed to test the AIDS restriction.

Melick, William R.

TI Understanding the Empirical Literature on Purchasing Power Parity: The Post-Bretton Woods Era. **AU** Edison, Hali J.; Gagnon, Joseph E.; Melick, William R.

Mendoza, Enrique G.

PD November 1993. **TI** Supply-Side Economics in an Integrated World Economy. **AU** Mendoza, Enrique G.; Tesar, Linda L. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 93/81; International Monetary Fund, Washington, DC 20431. **PG** 40. **PR** not available. **JE** E62, H87, H21. **KW** Tax Policy. Expenditure Policy. Fiscal Policy.
AB The macroeconomic effects of changes in tax and expenditure policies are examined in the context of the competitive equilibrium of a two-country two-sector model of an integrated world economy. Governments finance purchases and net transfers of tradable and nontradable goods by imposing distortionary taxes on factor incomes and consumption. The model is parameterized and calibrated using data from large industrial economies, including estimates of effective tax rates. Numerical simulations provide estimates of the welfare costs associated with existing distortionary taxes and of the potential gains linked to a more efficient use of these taxes. Welfare gains from tax reforms favoring indirect taxation are substantial. The effects of permanent changes in expenditures depend on their sectoral allocation across tradables and nontradables and on whether they are debt- or tax-financed. Trade in goods and assets is very sensitive to fiscal policy changes, but aggregate consumption patterns and welfare implications are not.

TI The Balassa-Samuelson Model: A General Equilibrium Appraisal. **AU** Asea, Patrick K.; Mendoza, Enrique G.

Mertens, Jean-Francois

TI Relative Utilitarianism. **AU** Dhillon, Amrita; Mertens, Jean-Francois.

Mester, Loretta J.

PD December 1993. **TI** Efficiency of Banks in the Third Federal Reserve District. **AA** Federal Reserve Bank of Philadelphia and University of Pennsylvania. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 94-1; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 21. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G21, D21. **KW** Banking. Bank Efficiency. X-Inefficiency.
AB In use the stochastic econometric cost frontier approach to investigate efficiency of banks operating in the Third Federal Reserve District, which comprises the eastern two-thirds of Pennsylvania, the southern half of New Jersey, and Delaware. The results indicate that, in general, banks in the district are operating at cost-efficient output levels and product mixes. Thus, there appears to be little potential cost savings from banks' changing their scale or scope of operations. However, I find a significant level of X-inefficiency at the banks, indicating potential cost savings from more efficient use of inputs. The second part of the article relates the inefficiency measures to several correlates.

TI A Positive Analysis of Bank Closure. **AU** Mailath, George J.; Mester, Loretta J.

Meyer, Margaret

PD January 1991. **TI** Organizational Prospects, Influence Costs and Ownership Changes. **AU** Meyer, Margaret;

Milgrom, Paul; Roberts, John. **AA** Meyer: Nuffield College; Milgrom and Roberts: Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1181; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 31. **PR** no charge. **JE** D23, L22, D21, G34. **KW** Divestitures. Influence Costs. Ownerships. Organizational Politics.
AB We augment efficiency-based theories of ownership by including influence costs. Our principal conclusion is that the prospect of organizational decline and layoffs creates additional influence costs in multi-unit organizations that would be absent if there was no prospect of layoffs and would be lessened or eliminated in focused organizations. This helps explain the tendency of firms to divest poorly performing units, as well as the pattern of sales of such units to firms already in businesses related to that of the divested unit.

Milgrom, Paul

TI Organizational Prospects, Influence Costs and Ownership Changes. **AU** Meyer, Margaret; Milgrom, Paul; Roberts, John.

Miller, Cynthia K.

TI The Influence of Nonmarital Childbearing on the Formation of First Marriages. **AU** Bennett, Neil G.; Bloom, David E.; Miller, Cynthia K.

Miller, Jeffrey B.

PD October 1993. **TI** Credit Ceilings and Monetary Policy in Bulgaria. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 93-11; Department of Economics, University of Delaware, Newark, DE 19716. **PG** 14. **PR** not available. **JE** E51, E58. **KW** Credit Ceilings. Monetary Policy. Central Banks.
AB Central banks are given the responsibility for controlling the money supply. By directing money supply growth, central banks play an essential role in controlling inflation. Since the early days of the transition to a market economy, credit ceilings have been utilized by the Bulgarian National Bank (BNB) to limit the growth of money and credit in the economy. We argue here that the changing institutional structure of financial markets in Bulgaria is reducing the effectiveness of credit ceilings. Alternative methods must be identified. With the increasing stability of important economic relationships, it is now possible for policy-makers to turn their attention away from credit ceilings and more towards market-oriented tools for monetary control. In particular, we argue that the money supply can be more successfully controlled by increasing reserve requirements for commercial banks and reducing the level of refinancing.

PD October 1993. **TI** The Bulgarian Banking System. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 93-12; Department of Economics, University of Delaware, Newark, DE 19716. **PG** 63. **PR** not available. **JE** E50, E51, E58. **KW** Monetary System. Banking System.
AB In 1991 the University of Delaware-Bulgaria Coalition, with the support of the United States Agency for International Development, began a program of economics education for Bulgarians. One of the persistent difficulties that I and my fellow economists have faced as we sought to be effective teachers of Bulgarian students and helpful observers of the

Bulgarian economy was the absence of summary materials that capture the specific detail of the Bulgarian economic system. This monograph seeks to temporarily fill the gap regarding the banking system of Bulgaria. Because of rapid changes as Bulgaria transitions to a market economy, it is not possible to be entirely current. The institutional arrangements described are those which existed in Bulgaria during the winter of 1992-1993.

PD October 1993. **TI** The Price Index Gap: A Window to Understanding the Bulgarian Economy. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 93-13; Department of Economics, University of Delaware, Newark, DE 19716. **PG** 25. **PR** not available. **JE** E30, E31, P00. **KW** Price Indices. Consumer Prices. Producer Prices. Bulgaria.
AB Since the transitions to market economies began in Eastern Europe and the former Soviet Union, several countries have seen the consumer price index rise much more rapidly than the producer price index. This gap between the growth rate in producer prices and retail/consumer prices has been particularly sharp in Bulgaria. This paper suggests some reasons why this gap has appeared. Because there is a gap, real exchange rate movements, real interest rates and real wage changes are very different when interpreted from the perspective of the two indices. Different growth rates of prices also imply a shifting "terms of trade" between sectors. Significant income is now being generated in the retail sector where there is new private market activity. The National Statistical Institute does not measure private market activity, but the growing gap between retail and producer prices provides some clues to the size of this new emerging private sector.

Minelli, Enrico

TI Trade and Welfare. **AU** Cordella, Tito; Minelli, Enrico; Polemarchakis, Heracles M.

PD November 1993. **TI** Knowledge at Equilibrium. **AU** Minelli, Enrico; Polemarchakis, Heracles M. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9354; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 18. **PR** not available. **JE** D82, D84. **KW** Rational Expectations. Common Knowledge. Symmetric Information.
AB In a game with rational expectations individuals refine their information with the information revealed by the elementary acts of strategies, information is essentially symmetric when the same profile is also an equilibrium of other individuals at each state of the world. At a Nash equilibrium profile of a game with symmetric information. We show that, at a Nash equilibrium of a game with rational expectations, the information of individuals is essentially symmetric, and their strategies are common knowledge.

Modica, Salvatore

PD October 1993. **TI** Unawareness: a Formal Theory of Unforeseen Contingencies. Part I. **AU** Modica, Salvatore; Rustichini, Aldo. **AA** Modica: Universite Catholique de Louvain. Rustichini: Universita di Palermo. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9336; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 13. **PR** not

available. **JE** D81, D83. **KW** Awareness. Uncertainty. Certainty.
AB This is the first of a sequence of two papers where we present a formal model of unawareness. We contrast unawareness with certainty and uncertainty. A subject is certain of something when he knows that thing; he is uncertain when he does not know it, but he knows he does not: he is consciously uncertain. On the other hand, he is unaware of something when he does not know it, and he does not know he does not know. This paper has three main purposes. First, we formalize the concept of awareness, and introduce a symmetry axiom. We then derive the basic properties of awareness. The second purpose is to prove a different axiomatic characterization, based on the concept of awareness, of the system which underlies the model of information with partitional structure. The third purposes of this paper is to show that without a substantial weakening of the rules of inferences normally assumed in model logic a satisfactory model of unawareness, which includes the symmetry axiom, is impossible. This alternative approach is developed in a second paper by the same authors.

Mongin, Philippe

PD May 1993. **TI** Consistent Bayesian Aggregation. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9319; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 38. **PR** not available. **JE** D70. **KW** Subjective Probabilities. Aggregation. Savagean Orderings.
AB The paper investigates the aggregation of first of all nonatomic subjective probabilities, second Savagean orderings, subject to the twofold consistency constraint that: (i) the aggregate is a subjective probability or a Savagean ordering, respectively; (ii) it satisfies the Pareto principle. Throughout the paper aggregation is viewed as a single-profile exercise. In the case of nonatomic probabilities affine aggregative rules are the only solutions to the consistency problem; the coefficient sign may be determined by applying the stronger Pareto conditions. Special unanimity properties result from the assumption of nonatomicity. Under Pareto-indifference alone, as well as under any other Pareto condition when some minimum unanimity condition holds, solutions have to satisfy the overdetermined constraint that both the aggregate utility and the aggregate probability are affine in terms of the corresponding individual items. This uniqueness result is shown to imply two Impossibility Theorems. Under Pareto-indifference, as well as Weak Pareto when minimum unanimity prevails, affinely independent probabilities or utilities lead to some form of dictatorship. Under Strong Pareto and minimum agreement the same independence assumptions lead to sheer impossibility unless either the utilities or the probabilities, respectively, are identical.

TI Belief Closure: A Semantics of Common Knowledge for Modal Propositional Logic. **AU** Lismont, Luc; Mongin, Philippe.

PD November 1993. **TI** A Non-Minimal but Very Weak Axiomatization of Common Belief. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9346; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 10. **PR** not available. **JE** D83.

KW Neighborhood Semantics. Common Belief.
AB The paper introduces a modal logic system of individual and common belief which is shown to be sound and complete with respect to a version of Neighborhood semantics. This axiomatization of common belief is the weakest of all those currently available; it dispenses with even the Monotonicity rule of individual belief. It is non-minimal in that it does not use just the Equivalence rule but the conjunction of the latter with the specially devised rule of C-Restricted Monotonicity.

Montgomery, David B.

TI Simulation Games as a Research Method for Studying Strategic Decision Making: The Case of MARKSTRAT. **AU** Lant, Theresa K.; Montgomery, David B.

Moreno, Diego

PD July 1993. **TI** Coalition-Proof Equilibrium. **AU** Moreno, Diego; Wooders, John. **AA** Moreno: University of Arizona and University Carlos III de Madrid. Wooders: University of Arizona. **SR** University of Arizona Economics Working Paper: 93-7; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. **PG** 20. **PR** $2 Canada and U.S.; $3 Overseas by air. **JE** C72. **KW** Non-Cooperative Games. Pre-Play Communication. Correlated Strategies.
AB We characterize the set of agreements that the players of a non-cooperative game may reach when they have the opportunity to communicate prior to play. Since agreements are of a non-binding nature, they must not be subject to profitable self-enforcing deviations by coalitions of players. By formalizing the concepts of feasible and self-enforcing deviations by a coalition from a given agreement, we arrive at a notion of coalition-proof equilibrium for games of complete and incomplete information. We argue, that pre-play communication allows players to correlate their actions, and therefore that the appropriate space of agreements to consider is the set of correlated strategies. Our concept differs from the notion of coalition-proof communication equilibrium proposed by Einy and Peleg in the criterion used to determine when a deviation upsets an agreement, and in that we consider the possibility of deviations which involve the players of a coalition jointly misreporting their types.

Mouchart, M.

TI Examining the Econometric Relevance of Discretizing Panel Data: An Application to the Belgian Labour Market. **AU** Cahuzac, E.; Mouchart, M.; Van Der Linden, B.

Moulton, Kirby

PD November 1993. **TI** Dimensions of the Global Processing Tomato Industry. **AU** Moulton, Kirby; Garoyan, Leon; Hetland, Norman. **AA** Moulton and Hetland: University of California, Berkeley. Garoyan: University of California, Davis. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 692; Department of Agricultural and Resource Economics, 313 Giannini Hall, UC Berkeley, Berkeley, CA 94720. **PG** 12. **PR** $5.00. **JE** Q11. **KW** Tomato Paste. World Processing. Agricultural Prices.
AB This paper considers the capability of the world processing tomato industry to expand tomato paste production without requiring substantial new capital investment. It responds to concerns about a return to the depressing

oversupply conditions of the last few years. We conclude that such a danger exists because there is a current global overcapacity of 5 million metric tons of raw product beyond 1993 input levels. Attempts to utilize this capacity, without a corresponding increase in consumer demand, would depress paste prices once again below profitable levels. Our analysis focuses on supply side issues only, and not on potential demand changes.

Mulligan, James G.
TI   Panel Data: Controlling for Individual Effects in Models of Learning. AU   Gilby, Elaine M.; Link, Charles R.; Mulligan, James G.

Myles, Gareth D.
PD   May 1992. TI   Ramsey Pricing in Imperfectly Competitive Economies.   AA   University of Exeter. SR   University of Exeter Department of Economics Discussion Paper: 92/02; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG   20. PR   no charge. JE   D40, D43, H20. KW   Imperfect Competition. Taxation. Ramsey Pricing.

AB   Ramsey prices result from the maximization of social welfare subject to budget constraint. It is well-known how they can be supported by a set of optimal taxes in a competitive economy. This paper shows how they can also be sustained in an imperfectly competitive economy by the use of a combination of ad valorem and specific taxation. Such an optimal tax system eliminates the welfare loss due to monopoly power.

PD   August 1993. TI   A Model of Tax Evasion with Group Conformity and Social Customs. AU   Myles, Gareth D.; Naylor, Robin A. AA   Myles: University of Exeter. Naylor: University of Warwick. SR   University of Exeter Department of Economics Discussion Paper: 92/03; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. PG   20. PR   no charge. JE   H20, H26. KW   Tax Evasion. Social Norms. Equilibria.

AB   A model of tax evasion is investigated in which a social custom utility is derived when taxes are payed honestly and there is a conformity payoff from adhering to the standard pattern of social behavior. A taxpayer faces a choice between whether to evade or not and, if evasion is chosen, a straightforward choice with risk over the level of evasion. This framework reconciles the standard model of tax evasion with the social custom and conformity model and the observation that some taxpayers do not evade. The existence of social equilibria is proven and it is shown that both equilibria with 0% evasion and with all taxpayers choosing to evade may exist. The 0% evasion equilibrium may be destroyed by a small change in the tax rate leading to epidemics of evasion after seemingly insignificant tax changes. The comparative statics of interior equilibria can explain the findings of Clotfelter (1983) and Crane and Nourzad (1986) concerning observed aggregate data on tax evasion. Predictions are also made upon how the proportion of evaders is affected by changes in the environment. A number of extensions of the basic framework are also considered and, with one exception, it is argued that these do not significantly modify the conclusions derived.

TI   The Equivalence Between Destination and Restricted Origin Tax Regimes. AU   Lockwood, Ben; de Meza, David;

Myles, Gareth D.

Nadiri, M. Ishaq
PD   December 1993. TI   Estimation of the Depreciation Rate of Physical and R&D Capital in the U.S. Total Manufacturing Sector. AU   Nadiri, M. Ishaq; Prucha, Ingmar R. AA   Nadiri: New York University and National Bureau of Economic Research. Prucha: University of Maryland. SR   National Bureau of Economic Research Working Paper: 4591; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   24. PR $5.00. JE   E20, E22, O47. KW   Knowledge Capital. Physical Capital. Productivity.

AB   Numerous studies on production and cost, the sources of productivity and studies on endogenous growth have recognized the pivotal role of the physical capital stock. Also there is a clear recognition by economists and policy makers that knowledge capital approximated by R&D capital is crucial for productivity growth and the transformation of the industrial structure of an economy. Critical to these contributions of physical and R&D capital is the measurement of the stocks of physical and R&D capital, which in turn requires measuring their depreciation rates. In this paper we have specified a model of factor demand that allows for estimating the depreciation rate of both physical and R&D capital jointly with the other model parameters. The model was estimated for the U.S. total manufacturing sector. Our estimate for the depreciation rate of physical capital is 0.059 and that for R&D capital is 0.12. Only gross investment data are needed to estimate the model parameters and the depreciation rates, and to generate consistent series for the stocks of physical and R&D capital.

Nagin, Daniel
PD   November 1993. TI   The Effect of Conviction on Income Through the Life Cycle. AU   Nagin, Daniel; Waldfogel, Joel. AA   Nagin: Carnegie Mellon University. Waldfogel: Yale University and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 4551; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   21. PR $5.00. JE   K00, K14, K42, D91. KW   Life Cycle. Criminal Behavior. Conviction.

AB   Existing studies of the impact of conviction on income and employment do not consider life cycle issues. We postulate that conviction reduces access to career jobs offering stable, long-term employment. Instead, conviction relegates offenders to spot market jobs, which may have higher pay at the outset of the career but do not offer stable employment or rapidly rising wages. Thus, first-time conviction may increase the wages of young workers while decreasing the wages of older workers. We test our theory with data on federal offenders and find that first-time conviction has a positive and significant effect on income for offenders under age 25 and an increasingly negative and significant impact for offenders over age 30. These results imply that the present value of income lost as a result of conviction varies over the life cycle, reaching a maximum in the middle of the career. We find that the gains sought by these offenders follow similar profiles, suggesting that prospective offenders are deterred by the possibility of lost future income. Because the discounted loss in future income facing young offenders may be small, our results may provide part of an explanation of youth crime.

Nava, Mario

AB The paper deals with optimal taxation and provision of public goods in a two-class economy with non linear income and linear commodity taxes. As far as optimal taxation is concerned, we first show that with two private goods the good complementary with leisure should be taxed more heavily, which extends the standard result with full non linear taxes to the case where indirect taxes cannot be differentiated across individuals. Second the effective tax rate of marginal income taxation is shown to be zero for the high ability individuals and under plausible assumptions positive for the low ability individual. As to the provision of public goods we extend recent results for a two class economy with non linear direct taxes by having also linear indirect taxes. The standard Samuelson Rule is modified by two additional terms related to the self selection constraint and to the revenue of indirect taxes. They are both equal to zero when the agents' utility functions are weakly separable between public and private goods (taken together) and leisure.

Naylor, Robin A.

Nehring, Klaus

AB This paper develops axiomatically a theory of rational choice for decision- makers whose preferences are exhaustively described by partial orders with appropriate structure. "Rationality" is conceptualized in terms of a "Principle of Preference-Basedness," according to which rational choice should be isomorphic to asserted preference. The obtained solution can be interpreted as the fair agreement in a bargaining game (technically: as Kalai-Smorodenvity solution) whose players correspond to the different conflicting interests that make the decision-maker's preferences incomplete. While the paper focuses on decision-making under uncertainty, the developed theory is also applicable to multi-attribute decision-making and to utilitarian social choice.

Neumark, David

AB In Neumark and Wascher (1992), we present findings supporting the earlier consensus that minimum wages reduce employment for teens and young adults, with elasticities in the range -0.1 to -0.2. In addition, we find that subminimum wages moderate these disemployment effects. Card, Katz and Krueger (1993) criticize numerous aspects of our analysis, and contest our conclusions. This reply presents an assessment of their arguments, as well as additional evidence related to some of the criticisms that they raise. We conclude that the issues raised by Card, et al., upon further examination, do not alter the conclusions from our original paper, and in some cases even reinforce those conclusions.

Neven, Damien

AB This paper analyses the pattern of state aids to the manufacturing sector in 10 EC countries for the period 1981-1990. We focus on determinants suggested by the political economy of state aids. We estimate a regression model where the intensity of state aids is accounted for by the weakness of government, their ideological orientation, the concentration of industry, and the timing of elections. The evidence indicates that the fractionalization of parties in the house is associated with higher state aids. We also find support for the view that state aids are higher under right wing government and when firms interest are highly concentrated. This is consistent with a partisan view of government in which firms represent an important constituency for right wing coalitions. By contrast, the timing of elections does not seem to matter. Finally, we observe significant fixed country effects. We gather evidence on the transparency of procedure used to allocate and control state aids and suggest that these fixed effects could be associated with lax procedures which enhance the scope for capture.

AB This paper assesses convergence in output per head across regions in the European Community, for the period 1975-1990. We use three alternative methodologies to measure convergence, which yield consistent results. We observe that there are strong differences in the pattern of convergence across sub-periods and across subsets of regions. If the South of Europe seems to catch up in the early eighties, it stagnates, at best, in the second part of the eighties. At the opposite, the regions in the North of Europe tend to stagnate or diverge in the

first part of the eighties but converge strongly thereafter. This pattern is consistent with the view that Northern European countries have adjusted better to the main change in policy regime which occur in the mid eighties, namely the implementation of the internal market programme and the entry of the Iberian peninsula in the Community in 1985. This evidence also lends support to the view that trade liberalization can exacerbate disparities. Finally, our evidence indicates that the distinction between the North and the South of the EC is likely to be more relevant in the analysis of growth patterns than the distinction between the centre and the periphery. Preliminary evidence on migrations indicates that the population for the Southern regions respond much more slowly to wage and unemployment differences. This may explain partly why Southern regions have not converged after 1985.

Newbery, David M.

PD October 1993. **TI** Transformation in Mature Versus Emerging Economies: Why has Hungary Been Less Successful than China? **AA** University of Cambridge. **SR** University of Cambridge Discussion Papers on Economic Transition: DPET 9310; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 25. **PR** $5.00 (L2.50); checks payable to University of Cambridge. **JE** O57, P52, H50, L50. **KW** State Enterprises. Economic Transition. Reform Sequencing.
AB China has reformed gradually by introducing competition into a state-controlled economy with dramatic effects on its growth rate. Eastern Europe's reforms were accompanied by output collapse. The difference lies in the sequencing of reforms and the constraints imposed by their initial conditions. China encouraged competitive entry by small firms, and delayed difficult enterprise reform. East Europe's extensive insurance systems required heavy taxation while China's over-insured enterprise sector was smaller and relatively declining. China cut expenditures by devolving and reducing insurance, while Eastern Europeans increased demand for insurance, keeping expenditures and tax rates oppressively high.

Nordhaus, William D.

PD January 1994. **TI** Marching to Different Drummers: Coordination and Independence in Monetary and Fiscal Policies. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1067; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 33. **PR** no charge. **JE** E63, E61, H62. **KW** Policy. Coordination. Deficit Reduction.
AB Most countries have recently experienced high fiscal deficits and real interest rates that depressed national saving and slowed economic growth. This study analyzes the reasons that underlie the skewed fiscal-monetary mix. The first section develops a game-theoretic model of fiscal and monetary coordination and shows that the macroeconomic outcomes depend upon the degree of coordination or independence. The second section applies this approach to the Clinton package by using three macroeconomic models to estimate the likely macroeconomic impacts of different degrees of coordination. The paper concludes that an uncoordinated policy may lead to substantial loss of output that will not be offset by higher potential output growth for many years. This implies that the potential gains from coordination are extremely high.

Olley, Steven

TI A Limit Theorem for a Smooth Class of Semiparametric Estimators. **AU** Pakes, Ariel; Olley, Steven.

Orme, Chris

PD October 1993. **TI** Maximum Likelihood Estimation in Binary Data Models Using Panel Data Under Alternative Distributional Assumptions. **AU** Orme, Chris; Fry, Tim R. L. **AA** Orme: University of York. Fry: Monash University. **SR** Monash Department of Econometrics Research Working Paper: 16/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 12. **PR** no charge. **JE** C23. **KW** Binary Models. Panel Probit. Burr Distribution.
AB This note considers a model of (recurrent) univariate binary outcomes which incorporates random individual effects. Given simplifying distributional assumptions, a likelihood can easily be obtained having the attractive feature of being the product of contributions which only involve sums and no numerical integration. A recent paper by Conaway (1990) considers the same problem but solves it by finding expressions for the probabilities of all the 2 to the T possible sequences of the T recurrent binary outcomes, some of which will not be observed in a given data set. The approach adopted in this paper derives an expression for the appropriate likelihood given a particular set of data. The likelihood, score vector and hessian matrix can all be written in simple forms which readily permits the use of Newton- Raphson/gradient methods to locate the roots of the score equations. Simulation experiments suggest that convergence is rapid and also provide evidence on the robustness of the model to distributional misspecification.

Ostry, Jonathan D.

PD October 1993. **TI** Selective Government Interventions and Economic Growth: A Survey of the Asian Experience and its Applicability to New Zealand. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/93/17; International Monetary Fund, Washington, DC 40231. **PG** 20. **PR** not available. **JE** O12, O40, O56, O53. **KW** Economic Reform. Government Intervention.
AB Since the mid-1980's, New Zealand has been engaged in a broad-ranging economic reform program--involving liberalization of key sectors of the economy, reduction in trade protection, and trimming of the public sector-- in order to restructure its economy and stimulate growth. With growth performance having been rather lackluster in recent years, questions have been raised as to whether a more interventionist approach--such as that followed by some Asian countries-- might be warranted in order to place the economy on a higher growth path. A review of the empirical literature dealing with the experience of the dynamic Asian economies does not suggest that their success can be attributed to any significant degree to selective government interventions.

Pakes, Ariel

PD January 1994. **TI** A Limit Theorem for a Smooth Class of Semiparametric Estimators. **AU** Pakes, Ariel; Olley, Steven. **AA** Pakes: Yale University and National Bureau of Economic Research. Olley: New York University and National Bureau of Economic Research. **SR** Yale Cowles Foundation Discussion Paper: 1066; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale

Station, New Haven, CT 06520. **PG** 51. **PR** no charge. **JE** C13, C14. **KW** Semiparametric m-Estimators. Selection Bias. Simultaneity Bias.
AB We consider an econometric model based on a set of moment conditions which are indexed by both a finite dimensional parameter vector of interest, theta, and an infinite dimensional parameter, h, which in turn depends upon both theta and another infinite dimensional parameter, t. The model assumes that the moment conditions equal zero at the true value of all unknown parameters. Estimators of theta are obtained by forming nonparametric estimates of h and t, substituting them into the sample analog of the moment conditions, and choosing that value of theta makes the sample moments as "close as possible" to zero. Using independence and smoothness assumptions the paper provides consistency, root n consistency, and asymptotic normality proofs for the resultant estimator. As an example, we consider Olley and Pakes' (1991) use of semiparametric techniques to control for both simultaneity and selection biases in estimating production functions.

Park, Byeong
PD December 1993. **TI** Stochastic Frontiers: A Semiparametric Approach. **AU** Park, Byeong; Sickles, Robin C.; Simar, Leopold. **AA** Park and Simar: Universite Catholique de Louvain. Sickles: Rice University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9357; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 12. **PR** not available. **JE** C23, C14, L93. **KW** Stochastic Frontier Model. Efficient Estimation Panel Data.
AB This paper generalizes the results of Hausman and Taylor (1981), Schmidt and Sickles (1984), Cornwell, Schmidt and Sickles (1990) and Park and Simar (1992) to the efficient IV estimation of panel models in which the random effects are correlated with a subset of the regressors. The model in which the estimator has particular promise is the stochastic frontier model in which it is posited that inefficiency is correlated with certain characteristics of the determinants of technology, which renders the random components treatment of efficiency inconsistent. In the spirit of Robinson (1988) our semiparametric model assumes a particular form for the frontier production function while considering the joint density of the individual firm-specific effects and those regressors with which they are potentially correlated as unknown. Efficiency of the slope parameters and the asymptotic properties of the level of the frontier function are explored.

Park, In-Uck
PD March 1994. **TI** A Revealed-Preference Implication of Weighted Utility Decisions Under Uncertainty. **AA** University of Bristol. **SR** University of Bristol Economics Working Paper: 94/375; Department of Economics, University of Bristol, Alfred Marshall Building, 8 Woodland Road, Bristol BS8 1TN, ENGLAND. **PG** 25. **PR** no charge. **JE** D11, D81. **KW** Non-Expected Utility. Revealed Preference.
AB Revealed preference of the weighted utility theory of Chew (1983) is investigated in the same set-up as Green and Osband (1991) for expected utility theory; the structure of the partition of the state simplex according to the chosen act is examined. It is shown that the boundary between two chosen acts generated by a weighted utility is the solution set to a quadratic equation. Moreover, except for "special" pairs of acts, the actual shape of the observable boundary between chosen acts is non-affine within a generic subset of weighted utilities, so that it is distinguishable from boundaries generated by expected utilities which are affine according to Green and Osband.

Parker, Karen
PD October 1993. **TI** A Framework for Assessing Fiscal Sustainability and External Viability with an Application to India. **AU** Parker, Karen; Kastner, Steffen. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 93/78; International Monetary Fund, Washington, DC 20431. **PG** 25. **PR** not available. **JE** E61, E63. **KW** Fiscal Policy. Simulation. Public Spending.
AB This paper presents a simple macroeconomic simulation model which can be used to evaluate alternative fiscal strategies and their implications for external viability. It attempts to bridge the gap between the literature on fiscal sustainability and the demands of operational work. The framework, developed in a spreadsheet format, generates estimates of public spending compatible with identified targets for growth, inflation and domestic and foreign borrowing. The difference between the spending path consistent with these targets and that based on current policies is the fiscal adjustment required to meet the authorities' macroeconomic objectives. Alternatively, the framework can be used to assess the implications for inflation, interest rates and public indebtedness of a given spending path. Finally, one can analyze the impact of financial reform on fiscal and external performance. The model is applied to India to illustrate the types of simulations that may be conducted.

Parker, P.
PD December 1993. **TI** Aggregate Diffusion Forecasting Models in Marketing: A Critical Review. **AA** INSEAD. **SR** INSEAD Working Papers: 93/92/TM/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 37. **PR** not available. **JE** M31, C51. **KW** Product Diffusion. Aggregate Models.
AB Since the 1960's, a number of new product diffusion models have been developed and applied in marketing. This paper reviews the theoretical origins, specifications, data requirements, estimation procedures, and pre- launch calibration possibilities for these aggregate models. Following a critical review of both the problems and the potential benefits of these models, a number of suggestions are made with respect to future academic and applied research involving new product diffusion forecasting.

Parson, Edward A.
PD November 1993. **TI** Sustainable Development as Social Learning: Theoretical Perspectives and Practical Challenges for the Design of a Research Program. **AU** Parson, Edward A.; Clark, William C. **AA** Harvard University. **SR** John F. Kennedy School of Government Discussion Paper: R93-37; Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138. **PG** 27. **PR** no charge. **JE** D83, O18. **KW** Regional Development. Social Learning.
AB This paper reviews relevant social theory seeking hypotheses and questions to guide a series of case studies in the

social and ecological determinants of sustainable regional development. With a focus on decadal-scale change, we employ "social learning" as the theme to cut across several diverse areas of social theory. We review several branches of theory: theories of individual learning; learning by groups and organizations; learning in scientific and policy-making communities; and evolutionary models of social change. The best developed theories of learning are at the level of individuals and small, face-to-face groups. The most immediate need in advancing understanding of processes sustainable regional development is a larger stock of empirically rich case studies informed but not constrained by today's body of social learning theory.

Parsons, George R.

PD December 1993. **TI** Benefits Transfer in a Random Utility Model of Recreation. **AU** Parsons, George R.; Kealy, Mary Jo. **AA** Parsons: University of Delaware. Kealy: U.S. Environmental Protection Agency. **SR** University of Delaware Department of Economics Working Paper: 93-17; Department of Economics, University of Delaware, Newark, DE 19716. **PG** 16. **PR** not available. **JE** Q20, Q26. **KW** Random Utility. Recreation. Resource Constraints.
AB Time and other resource constraints often call for benefit-cost analyses of environmental policies that rely on models from existing studies. When such analyses are done the benefit or cost assessment is said to be "transferred" from an existing study to a policy site. Little economic analysis has been done to judge the viability of such transfers. This is unfortunate given their widespread use. In this paper we present results of an experiment designed to help judge the viability of transferring a Random Utility-Model (RUM) of recreation. Our experiment follows the design of Atherton and Ben-Akiva(1976). We analyze a RUM of lake recreation in the state of Wisconsin. The model is based on the survey results of 603 individuals who visited lakes in the state. We divide the data set into two groups: (1) respondents living in Milwaukee County and (2) respondents not living in Milwaukee County. Then we transfer a model estimated with the non-Milwaukee sample to the Milwaukee sample. Our (hypothetical) purpose throughout is to estimate the benefits of improving water quality for the 117 Milwaukee residents. Since we have the same information for individuals in this sample as we have in the non-Milwaukee sample, we have a means of judging the viability of transfer.

Pavlopoulos, A.

PD June 1993. **TI** The Value of Failure. **AU** Pavlopoulos, A.; Haller, H. H. **AA** Pavlopoulos: Universite Catholique de Louvain. Haller: Virginia State University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9328; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 16. **PR** not available. **JE** O30. **KW** Failed Experiments. Patent Race.
AB This simple patent race model distinguishes between technological success and economic success in a firm's research project. It is shown that under certain conditions a researching firm can be technologically unsuccessful and economically successful.

Pedersen, Peder J.

PD February 1994. **TI** Postwar Growth of the Danish Economy. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1994-6; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 39. **PR** no charge. **JE** O47, O52, N14. **KW** Productivity Performance. Growth Determinants. Economic Policy.
AB Economic growth in Denmark in the postwar years has been close to the OECD average. The "golden age" of very high growth was however of shorter duration in Denmark than in most other OECD countries. The main emphasis is on the description of productivity performance in the postwar years and growth performance in a long run international context. Growth perspectives originating in the 1930's and 1940's are included before the analysis is taken up of growth determinants in the postwar years. Sectoral shifts in production and shifts in relative prices contribute significantly to a reduction of growth some years before the OPEC shocks. Finally, economic policy in the postwar years is discussed with special emphasis on the implications for growth.

Peeters, Dominique

TI Location on Networks. **AU** Labbe, Martine; Peeters, Dominique; Thisse, Jacques-Francois.

Perloff, Jeffrey M.

TI Why Industrial Policies Fail: Limited Commitment. **AU** Karp, Larry S.; Perloff, Jeffrey M.

TI The Failure of Strategic Industrial Policies Due to the Manipulation by Firms. **AU** Karp, Larry S.; Perloff, Jeffrey M.

PD September 1993. **TI** Tariffs and Quotas that Lower Prices and Raise Welfare. **AA** University of California, Berkeley. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 679R; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 18. **PR** $5.75. **JE** F13, F12. **KW** Spatial Differentiation. Tariffs. Quotas.
AB An increase in a tariff or a reduction in a quota may lower prices and raise welfare in markets with spatially differentiated products. These results are illustrated using a standard spatial model with linear disutility or transportation costs (Hotelling 1929, Salop 1979). A domestic and a foreign firm each produce a product at different locations in characteristic space. A higher tariff or smaller quota causes the foreign firm to sell fewer units. The domestic firm may find it profitable to lower its price to capture the customers who previous purchased from the foreign firm. The first section discusses the properties of the basic spatial differentiation model with a tariff. Section two examines the effects of tariffs on prices, profits, and welfare. The corresponding analysis for quotas is presented in the third section. A final section draws conclusions and interprets the results.

TI Legal Status and Earnings of Agricultural Workers. **AU** Ise, Sabrina; Perloff, Jeffrey M.

Pestieau, Pierre

TI Bequests as an Heir "Discipline Device". **AU** Cremer, Helmuth; Pestieau, Pierre.

Peterson, Steven R.
TI Environmental Regulation and International Competitiveness: What Does the Evidence Tell Us? AU Jaffe, Adam B.; Peterson, Steven R.; Portney, Paul R.; Stavins, Robert N.

Phillips, Garry D. A.
TI Bootstrapping Two-Stage Least Squares Estimates. AU Ip, Wai Cheung; Phillips, Garry D. A.

TI Bias Assessment and Reduction in Linear Error-Correction Models. AU Kiviet, Jan F.; Phillips, Garry D. A.

Phillips, Peter C. B.
PD November 1993. TI Robust Nonstationary Regression. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1064; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. PG 40. PR no charge. JE C13, C22, C14. KW Nonstationarity. Serial Dependence. FM-LAD Estimator.
AB This paper provides a robust statistical approach to nonstationary time series regression and inference. Fully modified extensions of traditional robust statistical procedures are developed which allow for endogeneities in the nonstationary regressors and serial dependence in the shocks that drive the regressors and the errors that appear in the equation being estimated. The suggested estimators involve semiparametric corrections to accommodate these possibilities and they belong to the same family as the fully modified least squares (FM-OLS) estimator of Phillips and Hansen (1990). Specific attention is given to fully modified least absolute deviation (FM-LAD) estimation and fully modified M (FM-M)-estimation. The criterion function for LAD and some M-estimators is not always smooth and the paper develops generalized function methods to cope with this difficulty in the asymptotics. The results given here include a strong law of large numbers and some weak convergence theory for partial sums of generalized functions of random variables.

Phleiderer, Paul
TI Large Shareholder Activism, Risk Sharing, and Financial Market Equilibrium. AU Adenate, Anat R.; Phleiderer, Paul; Zechner, Josef.

Pietra, T.
PD June 1993. TI Equilibrium with Incomplete Financial Markets: Uniqueness of Equilibrium Expectations and Real Indeterminacy. AU Pietra, T.; Siconolfi, Paolo. AA Pietra: Rutgers University and IGIER. Siconolfi: Columbia University. SR Universite Catholique de Louvain CORE Discussion Paper: 9334; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 20. PR not available. JE D52. KW Incomplete Markets. Uniqueness. Indeterminacy.
AB We consider a general equilibrium model with incomplete financial markets and nominal assets. Asset prices are given. Let D be the number of "missing" assets. If the number of agents is greater than 2(D + 1) and the number of period zero commodities greater than (2D + 1), there is a dense, residual set of economies (parameterized by utility functions) such that, for each pair of distinct financial equilibria, spot zero equilibrium prices are different. Hence, agents, observing first period of equilibrium prices, can formulate exact forecasts on future equilibrium prices, notwithstanding the real indeterminacy of the set of financial equilibria.

Ploberger, Werner
TI Admissibility of the Likelihood Ratio Test When a Nuisance Parameter is Present Only Under the Alternative. AU Andrews, Donald W. K.; Ploberger, Werner.

Plott, Charles R.
TI The Groves-Ledyard Mechanism: An Experimental Study of Institutional Design. AU Chen, Yan; Plott, Charles R.

TI EPA's New Emissions Trading Mechanism: A Laboratory Evaluation. AU Cason, Timothy N.; Plott, Charles R.

Pochet, Yves
TI Capacitated Facility Location: Valid Inequalities and Facets. AU Aardal, Karen; Pochet, Yves; Wolsey, Laurence A.

Polemarchakis, Heracles M.
TI Trade and Welfare. AU Cordella, Tito; Minelli, Enrico; Polemarchakis, Heracles M.

TI Knowledge at Equilibrium. AU Minelli, Enrico; Polemarchakis, Heracles M.

PD December 1993. TI Generic Existence of Competitive Equilibria When the Asset Market is Incomplete: A Symmetric Argument. AU Polemarchakis, Heracles M.; Siconolfi, Paolo. AA Polemarchakis: Universite Catholique de Louvain. Siconolfi: Columbia University. SR Universite Catholique de Louvain CORE Discussion Paper: 9355; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 19. PR not available. JE D52, D51, C62. KW Incomplete Markets. Existence of Equilibria.
AB The argument for the generic existence of competitive equilibria when the asset market is incomplete can be formulated with symmetric treatment of all individuals.

Polinsky, Mitchell A.
PD December 1993. TI Should Liability Be Based on the Harm to the Victim or the Gain to the Injurer? AU Polinsky, Mitchell A.; Shavell, Steven. AA Polinsky: Stanford University and National Bureau of Economic Research. Shavell: Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4586; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 15. PR $5.00. JE K14, K10, K40, K13. KW Liability. Injury. Legal System.
AB Should the level of liability imposed on an injurer be based on the harm he caused or instead on the gain he obtained from engaging in the harmful act? The main point of this article is that there is a strong reason to favor liability based on harm rather than gain when account is taken of the possibility of legal error. Notably, even a small underestimate of gain can lead an injurer to commit a harmful act when the harm greatly exceeds his gain, causing a large social loss. In contrast, a comparable error in the estimate of harm will not lead an injurer to engage in the harmful act when the harm significantly

exceeds his gain. The general superiority of harm-based liability is shown to hold under the rules of negligence and strict liability and regardless of whether potential injurers know the error that will be made.

Polzehl, Jorg
PD May 1993. **TI** Projection Pursuit Discriminant Analysis. **AA** Universite Catholique de Louvain and Humboldt - Universitat zu Berlin. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9320; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 20. **PR** not available. **JE** C13. **KW** Discriminant Analysis. Projection Pursuit.
AB A new approach to discriminant analysis based on projection pursuit density estimation is proposed. Projections are chosen to minimize estimates of the expected overall loss in each projection pursuit stage. Different strategies in the procedure concerning the choice of univariate density estimates and bandwidths used to estimate the function of interest in the minimization step to fix the direction and to update the discriminant rule and the estimates of the densities are discussed. Cross-validation techniques are used to avoid overfitting effects. In a simulation study several variants of the procedure are compared with discriminant rules based on normality assumptions and nonparametric classification procedures.

TI Model Selection and Variable Transformations in Nonlinear Regression. **AU** Bunke, Olaf; Droge, Bernd; Polzehl, Jorg.

Portney, Paul R.
TI Environmental Regulation and International *Competitiveness: What Does the Evidence Tell Us?* **AU** Jaffe, Adam B.; Peterson, Steven R.; Portney, Paul R.; Stavins, Robert N.

Potts, C. N.
TI Single Machine Scheduling with Set-Ups to Minimize the Number of Late Items: Algorithms, Complexity and Approximation. **AU** Kovalyov, M. Y.; Potts, C. N.; Van Wassenhove, L. N.

Prasad, Eswar
PD November 1993. **TI** Labor Market Aspects of Industrial Restructuring in Canada. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 93/91; International Monetary Fund, Washington, DC 20431. **PG** 9. **PR** not available. **JE** J20, E24, E32. **KW** Labor Productivity. Canada. Labor Market.
AB This note examines the recent developments in the Canadian labor market to provide a partial assessment of the magnitude and nature of industrial restructuring in Canada. The implications of industrial restructuring for the medium-and long-term prospects for the Canadian economy are examined. The evidence presented in this note suggests that the recent increases in labor productivity may represent a cyclical phenomenon rather than a permanent increase in the rate of growth of productivity.

Prasad, Kislaya
TI Learning by Observation Within the Firm. **AU** Dutta, Jayasri; Prasad, Kislaya.

Prucha, Ingmar R.
TI Estimation of the Depreciation Rate of Physical and R&D Capital in the U.S. Total Manufacturing Sector. **AU** Nadiri, M. Ishaq; Prucha, Ingmar R.

Rahman, Shahidur
PD October 1993. **TI** Marginal Likelihood Score-Based Tests of Regression Disturbances in the Presence of Nuisance Parameters. **AU** Rahman, Shahidur; King, Maxwell L. **AA** Monash University. **SR** Monash Department of Econometrics Research Working Paper: 15/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 22. **PR** no charge. **JE** C12. **KW** Lagrange Multiplier Test. Autocorrelation. Random Coefficients.
AB This paper is concerned with tests of the covariance matrix of the disturbances in the linear regression model that involve nuisance parameters which cannot be eliminated by usual invariance arguments. Score-based tests, namely Lagrange multiplier (LM) and locally most mean powerful (LMMP) tests are derived from the marginal likelihood. Applications considered include (i) testing for random regression coefficients; (ii) testing for second- order autoregressive (AR(2)) disturbances in the presence of AR(1) disturbances; and (iii) testing for ARMA(1,1) disturbances; each in the presence of AR(1) disturbances. An empirical size and power comparison shows that typically the new tests have more accurate asymptotic critical values and slightly more power than their respective conventional counterparts.

Raja, A.V
TI Economics of Scope, Economies of Scale, Cost and Production Functions. **AU** Heathfield, David F.; Raja, A.V.

Ramey Valerie A.
TI Foreign Competition, Market Power, and Wage Inequality: Theory and Evidence. **AU** Borjas, George J.; Ramey Valerie A.

Rankin, Mei Leng
PD November 1993. **TI** Pre-Test Strategies for Time-Series Forecasting in the Linear Regression Model. **AU** Rankin, Mei Leng; King, Maxwell L. **AA** Monash University. **SR** Monash Department of Econometrics Research Working Paper: 17/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 16. **PR** no charge. **JE** C52, C15. **KW** Misspecification. Pre-Testing. Autocorrelation.
AB In linear time-series regression analysis, there is typically uncertainty about which variables to include as regressors and the exact form of the disturbance process. This paper uses the Monte Carlo method to investigate the predictive performance of nine different pretesting strategies for misspecification. Data generating processes used in the study include first- order autoregressive (AR(1)) disturbances, first-order moving average disturbances, an extra exogenous regressor and the lagged dependent variable as an extra regressor. We find that remarkably robust predictions for a range of misspecified models result from applying the Durbin-Watson test for autocorrelation and correcting for AR(1) disturbances when the test is significant.

Rappaport, Neal

TI Econometric Estimates of Prices Indexes for Personal Computers in the 1990's. AU Berndt, Ernst R.; Rappaport, Neal; Griliches, Zvi.

Rasmussen, Bo Sandemann

PD January 1994. TI Wage Formation, the Structure of Labour Taxation and Welfare. AA University of Aarhus. SR Aarhus Institute of Economics Memo: 1994-5; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. PG 18. PR no charge. JE H24, H22, J51. KW Income Tax. Payroll Tax. Wage Bargaining.
AB Labor taxation can be divided into income taxes levied on employees and payroll taxes levied on firms. In a model with firm-specific wage bargaining where union members attached to a particular firm possess an outside employment option, we show that the structure of labor taxation generally matters for wages and employment. Several cases of non-equivalence of income and payroll taxes are given. Analytical welfare comparisons reveal that provided labor demand is sufficiently elastic, a reverse neutral restructuring that increase employment may represent a Pareto improvement, especially in expected utility terms.

Ravikumar, B.

TI Inventories, Production Smoothing, and Anticipated Demand Variations. AU Chatterjee, Satyajit; Ravikumar, B.

Ravn, Morten O.

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

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

Ray, Indrajit

PD November 1993. TI Coalition-Proof Correlated Equilibrium: A Definition. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9353; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 17. PR not available. JE C72. KW Correlated Equilibrium. Correlation Device.
AB We refine the notion of correlated equilibrium capturing the essence of coalition-proof Nash equilibrium concept. We define coalition-proof correlated equilibrium of a game as a pair consisting of a correlation device and a correlation-proof Nash equilibrium of the game extended by the correlation device. A direct coalition-proof correlated equilibrium is a canonical device such that the obedient strategy is a coalition-proof Nash equilibrium of the canonical extended game. The "revelation principle" does not hold. Even in the case of two-person games, there exists coalition-proof correlated equilibrium for which the corresponding induced distribution is not a direct coalition-proof correlated equilibrium. The set of direct coalition-proof equilibria is not convex unlike the set of correlated equilibria. For any game, a (pure) coalition-proof Nash equilibrium is always a direct coalition-proof correlated equilibrium. We compare our notion with other existing concepts through several examples.

Redish, Angela

TI A Comparison of the United States and Canadian Banking Systems in the Twentieth Century: Stability vs. Efficiency. AU Bordo, Michael D.; Rockoff, Hugh; Redish, Angela.

Reichlin, Pietro

PD September 1993. TI Diverging Patterns in a Two Country Model with Endogenous Labour Migration. AU Reichlin, Pietro; Rustichini, Aldo. AA Reichlin: Universita di Napoli. Rustichini: Universite Catholique de Louvain and New York University. SR Universite Catholique de Louvain CORE Discussion Paper: 9332; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. PG 28. PR not available. JE C62, D92, F20, J61. KW Labor Migration. Endogenous Growth. Free Trade.
AB Models with endogenous growth due to production externalities imply that per capita output is positively affected by the size of the labor force (which we interpret as the stock of human capital). In this framework we investigate the effects of labor migration between two countries in the presence of free trade and perfect capital mobility. We show that any wage differential between countries sets up a continuous flow of migration of the workforce from the "low wage"country to the "high wage" country. This flow does not dampen over time and wage differentials become larger and larger. As a consequence, the former country will be permanently underdeveloped with respect to the latter. In a second part of the paper we modify the model to the possible stable and unstable patterns of migration between countries and sectors and show that divergence as well as flow reversals are possible (the sending country may subsequentially become a receiving country).

Reiffen, David

TI Vertical Contracts as Strategic Commitments. AU Alexander, Cindy R.; Reiffen, David.

Reinelt, Peter

TI Alternatives for Managing Drought: A Comparative Cost Analysis. AU Fisher, Anthony; Fullerton, David; Hatch, Nile; Reinelt, Peter.

Reny, Philip J.

PD September 1993. TI The Partnered Core of a Game with Side Payments. AU Reny, Philip J.; Winter, Eyal; Holtz Wooders, Myrna. AA Reny: University of Western Ontario. Winter: Hebrew University. Holtz Wooders: University of Toronto. SR Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: B-258; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG 15. PR no charge. JE C71. KW Game Theory. Cooperative Games. Convex Games.
AB We introduce the notion of the partnered core of a game. A payoff is partnered if there are no asymmetric dependencies between any two players. A payoff is in the partnered core of a game if it is partnered, feasible and cannot be improved upon by any coalition of players. We show that the relative interior of the core of a game with side payments is contained in the partnered core. For quasi-strictly convex games the partnered core coincides with the relative interior of the core. When there are no more than three partnerships, the sums of the payoffs to partnerships are constant across all core payoffs. When there

are no more than three players, the partnered core satisfies additional properties.

Rhee, Moon-Whoan
TI   The Effect of Equity Barriers on Foreign Investment in Developing Countries. AU   Claessens, Stijn; Rhee, Moon-Whoan.

Ritter, Christian
PD   December 1993. TI   Profile Methods. AU   Ritter, Christian; Bates, Douglas M.   AA   Ritter: Universite Catholique de Louvain. Bates: University of Wisconsin, Madison.   SR   Universite Catholique de Louvain CORE Discussion Paper: 9345; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM.   PG   15.   PR   not available.   JE   C10. KW   Likelihood. Bayesian Inference. Profile Transforms.
AB   Profile methods, i.e., profile values, profile traces, profile transformations, and profile diagnostic plots, are introduced in a general setting and an interesting feature of profile transforms, the boxing property, is pointed out. Profile methods are then discussed in the frameworks of likelihood and Bayesian inference. Links with approximate Bayesian marginalization, Jeffrey's prior, and importance sampling are made. Some peculiarities of profile transforms for posterior distributions are investigated.

Rob, Rafael
TI   The Durability of Information, Market Efficiency, and the Size of Firms. AU   Fishman, Arthur; Rob, Rafael.

Roberts, John
TI   Organizational Prospects, Influence Costs and Ownership Changes. AU   Meyer, Margaret; Milgrom, Paul; Roberts, John.

Rockoff, Hugh
TI   A Comparison of the United States and Canadian Banking Systems in the Twentieth Century: Stability vs. Efficiency. AU   Bordo, Michael D.; Rockoff, Hugh; Redish, Angela.

Rodrigues, Carlo Farinha
PD   July 1993. TI   Measurement and Decomposition of Inequality in Portugal. AA   Centro de Investigacao Sobre Economia Portuguesa.   SR   University of Cambridge Microsimulation Unit Paper: MPMU 9302; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG   30. PR $5.00 (L2.50); checks payable to University of Cambridge.   JE   D31, I32.   KW   Income Distribution. Inequality.
AB   The objective of this study is to analyze the individual distribution of per equivalent adult income in Portugal for the years 1980/81 and 1989/90 using the primary data of two household budget surveys. Inequality in income is measured and decomposed by regional, demographic, educational and occupational factors. The results consistently point to a slight decline of inequality over the decade. Inequality "within-groups" contributes much more towards national inequality than the "between-groups" component of inequality. The analysis of the trend of inequality suggests that the decline in aggregate inequality is mainly due to changes in inequality within socioecomomic groups.

Rodrik, Dani
PD   December 1993. TI   Taking Trade Policy Seriously: Export Subsidization as a Case Study in Policy Effectiveness. AA   Columbia University and National Bureau of Economic Research.   SR   National Bureau of Economic Research Working Paper: 4567; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   36. PR $5.00. JE   F10, F13, F14. KW   Export Subsidization. Trade Policy.
AB   In thinking about policy, academic economists alternate between theoretical models in which governments can design finely-tuned optimal interventions and practical considerations which usually assume the government to be incompetent and hostage to special interests. I argue in this paper that neither of these caricatures is accurate, and that there is much to be learned by undertaking systematic, analytical studies of state capabilities -- how they are generated and why they differ across countries and issue areas. Case studies of export subsidization in Korea, Brazil, Turkey, India, Kenya, and Bolivia are presented to confront usual presumptions against actual experience. Contrary to conventional wisdom, the successful cases (Korea and Brazil) turn out to be ones in which the government exercised discretion and selectivity, while the most uniform and non-discretionary cases (Kenya and Bolivia) were clear failures. The paradox is explained in terms of state autonomy and policy coherence.

Roemer, John E.
PD   January 1994. TI   Neighborhood Effects on Belief Formation and the Distribution of Education Income. AU   Roemer, John E.; Wets, Roger J.-B. AA   University of California, Davis. SR   University of California at Davis Economics Department Working Paper: 94-02; Department of Economics, University of California at Davis, CA 95616-8578. PG   14. PR $3.00 U.S. and Canada. $4.00 International. JE   I21, D30, D61. KW   Markov Process. Neighborhood Effects.
AB   We study a society with a continuum of families, segregated in neighborhoods perfectly by income. There is a *deterministic, non-linear relationship between years of education* attained in youth and earnings in adult life. Youths choose years of education to acquire in order to maximize a utility function whose arguments are income as an adult and years of education attained, where education is experienced as costly. Talent is randomly distributed at each generation, and high talent reduces the welfare cost of attaining education: otherwise, all utility functions are identical. Youths do not know the true returns-to-education function, but form rational beliefs about that function by observing the education-income pairs of adults in their neighborhood, and making linear extrapolations. Our task is to compute the stationary distribution of income and education in this society. In that distribution, we show that, at many levels of income, there is a broad distribution of talent.

PD   January 1994. TI   Growth, the Escape from Poverty, and Inequality. AA   University of California, Davis. SR   University of California at Davis Economics Department Working Paper: 94-3; Department of Economics, University of California at Davis, CA 95616-8578. PG   24. PR $3.00 U.S. and Canada. $4.00 International. JE   P16, O40, I32, D31. KW   Endogenous Growth. Public Education. Income

Distribution.

AB Several recent papers on the political economy of growth have argued that increased skewness (often called inequality) in the distribution of wealth/ income implies slower growth. If the tax rate is decided by the voter with median income, then a poor median voter chooses high tax rates which reduces investment and growth. In the present model, investment, viewed as skill-increasing, comes from two sources: a public component, financed by taxes and equally distributed across all citizens, and a private one, chosen optimally by the individual. The growth rate is shown to rise with increased skewness. The model, additionally, enables us to study the growth rate in income of a class of poor citizens, those who choose to invest zero privately in education. Skewness turns out to be negatively correlated with the growth experience of the poor, and with the rate a which poverty is eliminated in economies. Thus, the aggregate growth rate of the economy is a statistic of dubious value for those who would measure the welfare of a society by the experience of its worst-off members.

Roldos, Jorge E.

AB We study the effects of a credible, gradual exchange rate based disinflation program in a two sector economy. After an initial real exchange rate depreciation, the reductions in the rate of devaluation reduce the monetary wedge generated by a cash in advance constraint, leading to a gradual increase in absorption that yields progressive real exchange rate appreciations and current account deficits. An initial boom in economic activity is not followed by a later contraction, as labor supply expands during the whole length of the program.

Roller, L. H.

AB In this paper we specify and estimate a structural model of competition for the European Airline Industry in order to assess the potential for price reductions if competition increases. The model has two distinguishing features: (i) We allow for firms to make short- and long-run decisions by explicitly estimating a structural, two-stage game. (ii) Our paper distinguishes between domestic market niches and competition at the international level, by specifying a product-differentiated game in the second stage. This distinction carries important policy implications. In general we find that relatively little market power is due to price collusion. In fact, firms compete significantly more than a standard Nash game would suggest. On the other hand, significant monopoly power is identified in domestic markets. Given that prices are not high because of cartel pricing, airline prices in Europe might come down more gradually as efficiency increases and market niches are abolished.

Rosen, Harvey S.

Rosenberg, Howard R.

AB While the explicit goal of the Immigration Reform and Control Act of 1986 (IRCA) was to control unauthorized immigration to the United States, diverse interest groups had other, dubiously compatible aims in supporting this complex law. Among these purposes were to reduce the relative isolation of the farm labor market, tighten supply within it, and thereby improve conditions of employment in agriculture. By now, however, we have in voluminous testimony and studies a consensus that the majority of farm workers are hurting as much as ever. Many observers relate tough times for workers to a trinity of labor market factors: (1) uncontrolled entry of new immigrants into the market, (2) decline of union membership and effectiveness, and (3) expanded use of and competition among farm labor contractors (FLC's). Opinions differ on the directions of influence among these three, but they are regarded as somehow all fitting together, with FLC's pivotal in growers' adjustments to IRCA that keep ineligible newcomers on the farm.

Rotemberg, Julio J.

AB This paper shows that the output losses from energy taxes are significantly larger than usually computed when due account is taken of imperfect competition among energy using firms. Even with perfect competition among these firms, the loss in GNP is of the same order of magnitude as the revenue raised by these taxes. However, in the presence of imperfect competition the output losses are much higher. There are particularly large transitory losses in the immediate aftermath of energy price increases when firms act as implicitly colluding oligopolists. These losses become considerably smaller if energy taxes are phased-in. We also show that taxes that affect only household consumption of energy have much smaller effects. In particular, for the empirically plausible parameter values we consider, such taxes have no effect on employment or output in the non-energy sector.

Rouse, Cecilia Elena
TI   Labor Market Returns to Two- and Four-Year College: Is a Credit a Credit and and Do Degrees Matter? AU   Kane, Thomas J.; Rouse, Cecilia Elena.

Rustichini, Aldo
TI   Diverging Patterns in a Two Country Model with Endogenous Labour Migration. AU   Reichlin, Pietro; Rustichini, Aldo.

TI   Unawareness: a Formal Theory of Unforeseen Contingencies. Part I. AU   Modica, Salvatore; Rustichini, Aldo.

Sachs, Jeffrey D.
PD   January 1994. TI   Structural Factors in the Economic Reforms of China, Eastern Europe and the Former Soviet Union. AU   Sachs, Jeffrey D.; Woo, Wing Thye. AA   Sachs: Harvard University. Woo: University of California, Davis. SR   University of California at Davis Economics Department Working Paper: 94-01; Department of Economics, University of California at Davis, CA 95616-8578. PG   50. PR $3.00 U.S. and Canada. $4.00 International. JE   P27, P30, P52, O14. KW   Economic Transition. Big Bang. Gradualism.
AB   The view that China's experience demonstrates the merits of "gradualism" compared with the "shock therapy" undertaken in Eastern Europe and the former Soviet Union (EEFSU) is wrong. It was China's economic structure that has proved felicitous to reform. China started its reform period as an agricultural society; whereas EEFSU started as an over-industrialized society. In both cases, employment in the state-enterprise sector tends to be heavily subsidized, so that most state workers will not voluntarily leave the state sector to join the non-state sector. As the EEFSU lacked a vast surplus-labor sector, its over-industrialization meant that market reform involved a decline of industry. Broadly speaking, normal economic development is likely to be pareto-improving: all major groups benefit from the flow of workers from low-productivity agriculture to higher-productivity industry. Structural adjustment, however, is likely to be conflictual as workers in the declining sectors fight to maintain their status.

Salomon, M.
TI   Strategic Production and Operations Management Issues in Product Recovery Management. AU   Thierry, M. C.; Salomon, M.; Van Nunen, J.; Van Wassenhove, L. N.

TI   Exact and Approximation Algorithms for the Tactical Fixed Interval Scheduling Problem. AU   Kroon, L. G.; Salomon, M.; Van Wassenhove, L. N.

Santaella, Julio A.
TI   Efficiency Wages and Labor Mobility in an Open Economy. AU   Agenor, Pierre-Richard; Santaella, Julio A.

Saunders, Anthony
TI   Bank Off-Balance Sheet Financial Innovations. AU   Jagtiani, Julapa; Saunders, Anthony; Udell, Gregory.

Scaillet, Olivier
TI   Testing for Continuous-Time Models of the Short-Term Interest Rate. AU   Broze, Laurence; Scaillet, Olivier; Zakoian, Jean-Michel.

Scarf, Herbert E.
PD   January 1994. TI   The Allocation of Resources in the Presence of Indivisibilities. AA   Yale University. SR   Yale Cowles Foundation Discussion Paper: 1068; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. PG   22. PR   no charge. JE   C61, C63. KW   Neighborhood Systems. Production Indivisibilities. Optimality.
AB   The paper begins with a discussion of the role played by competitive prices in detecting optimality when production takes place under constant returns to scale; it then illustrates the failure of prices to perform this task when indivisibilities are significant, and suggests the replacement of the pricing test by a specific quantity test. An example is discussed in detail.

Schauer, Frederick
PD   January 1994. TI   Amending the Presuppositions of a Constitution. AA   Harvard University. SR   Harvard John F. Kennedy School of Government Discussion Paper: R94-4; John F. Kennedy School of Government, 79 John F. Kennedy Street, Cambridge, MA 02138. PG   29. PR   no charge. JE   D72, K40, H11. KW   Constitutional Amendment. Constitutional Law. Social Change.
AB   It is characteristic of written constitutions that they establish the mechanisms for their own amendment, yet it is also the case that the basic sources and structures of constitutional decision-making, both by courts and by non-judicial policymakers, change over time even without the necessity of formal constitutional amendment. Close analysis of the phenomenon of constitutional change absent formal constitutional amendment reveals that the phenomenon is but an example of the broader way in which the authoritativeness of constitutions rests on pre-legal social and political understandings. As these pre-legal social and political understandings about the status of a written constitution change, then so too does a constitution change as well. The process of designing the formal mechanisms for constitutional amendment therefore, should remain attentive to the fact that no formal amendment process can ever be exhaustive, and that the process of constitutional amendment remains as much a sociological issue as a formal legal one.

Schinasi, Garry J.
TI   Asset Price Inflation in the 1980's: A Flow of Funds Perspective. AU   Hargraves, Monica; Schinasi, Garry J.; Weisbrod, Steven R.

Schnitzer, Monika
TI   Tying Trade Flows: A Theory of Countertrade. AU   Marin, Dalia; Schnitzer, Monika.

Schroyen, Fred
TI   Optimal Taxation and Provision of Public Goods with Non Linear Income and Linear Commodity Taxes in a Two Class Economy. AU   Nava, Mario; Marchand, Maurice; Schroyen, Fred.

Schupack, Mark B.
PD   January 1994. TI   The "New" International Trade Theory: Review of Two Books. AA   Brown University. SR   Brown University Department of Economics Working Paper: 94-3; Department of Economics, Brown University,

Providence, Rhode Island 02912. **PG** 11. **PR** no charge. **JE** F12. **KW** Imperfect Competition. Increasing Returns. **AB** This is a review of two books: Gene M. Grossman, ed., Imperfect Competition and International Trade and Elhanan Helpman and Paul R. Krugman, Trade Policy and Market Structure. The books deal with the consequences for international trade theory and policy when the traditional trade models are expanded to include case where production shows increasing returns to scale and competition is imperfect. The review compares the traditional theoretical results with those produced by the expanded theory. The old results are not invalid, but new forces are added that may change previous conclusions. The policy implications of the new theory may also contradict the traditional results. Some parallels are drawn with the development of the "new" industrial organization theory and empirical work.

Schwab, Robert M.
TI Endogenous Growth, Public Capital, and the Convergence of Regional Manufacturing Industry. **AU** Hulten, Charles R.; Schwab, Robert M.

Sebo, Andras
PD July 1993. **TI** The Connectivity of Minimal Imperfect Graphs. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: C-93799-OR; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 10. **PR** no charge. **JE** C44. **KW** Graph Theory. Partitionable Graphs.
AB We prove that partitionable graphs are 2w - 2-connected, and that this bound is sharp. We study then the structure of cutsets of cardinality 2w - 2.

Serrano, Roberto
PD November 1993. **TI** Non-Cooperative Implementation of the Core. **AU** Serrano, Roberto; Vohra, Rajiv. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 93-41; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 17. **PR** no charge. **JE** C71, C72, D51. **KW** Nash Equilibrium. Subgame Perfect Equilibrium. Coalition.
AB The aim of this paper is to examine the non-cooperative basis of the core. We provide mechanisms that are motivated closely by the very description of the core, and have the property that their non-cooperative equilibrium outcomes coincide with the core. For private ownership economies we construct an extensive form mechanism in which each player proposes a status-quo and then also has an opportunity to recontract with any other coalition. A proposal to recontract is enforced if and only if it meets with the unanimous approval of such a coalition. We show that subgame perfect outcomes of this mechanism coincide with the core allocations of the underlying economy. We also consider general NTU games and construct a normal form mechanism that implements in Nash equilibrium the coalition structure core of such games. Here it is assumed that the mechanism designer does not know the characteristic function of the game but can observe utilities, enforce any coalition structure and impose small fines on the players.

TI A Non-Cooperative View of Consistent Bankruptcy Rules. **AU** Dagan, Nir; Serrano, Roberto; Volij, Oscar.

Shaffer, Sherrill
PD November 1993. **TI** Market Conduct and Excess Capacity in Banking: A Cross-Country Comparison. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 93-28; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 17. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** G21, L13, D43. **KW** Oligopoly. Banks. Contestability.
AB This paper estimates conduct and excess capacity of the banking industry in 15 countries during 1979-1991. Significant market power was found in five countries and excess capacity was indicated in one country. The estimates were consistent with either contestability or Cournot oligopoly in a majority of cases, with five countries significantly more competitive than Cournot.

Shavell, Steven
TI Should Liability Be Based on the Harm to the Victim or the Gain to the Injurer? **AU** Polinsky, Mitchell A.; Shavell, Steven.

Shea, Gary S.
PD August 1993. **TI** Gold Prices and the Interest Rate Term Structure During the Civil War: An Analysis of Their Common Trends. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 92/04; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** not available. **PR** no charge. **JE** C32, C22, E40, E43. **KW** Term Structure. Common Trends.
AB No abstract available.

PD August 1993. **TI** Testing for Market Efficiency with Volatility Statistics: Some Exact Finite-Sample Results. **AA** University of Exeter. **SR** University of Exeter Department of Economics Discussion Paper: 92/05; Department of Economics, University of Exeter, Amory Building, Rennes Drive, Exeter Devon, EX4 4RJ, ENGLAND. **PG** not available. **PR** no charge. **JE** G10, G14. **KW** Market Efficiency. Market Volatility.
AB No abstract available.

Shepard, Andrea
PD September 1993. **TI** Dynamic Pricing in Retail Gasoline Markets. **AU** Shepard, Andrea; Borenstein, Severin. **AA** Shepard: Stanford University and National Bureau of Economic Research. Borenstein: University of California, Davis and National Bureau of Economic Research. **SR** Stanford Graduate School of Business Research Paper: 1269; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 38. **PR** no charge. **JE** L13, D43, L16. **KW** Collusion. Gasoline. Imperfect Competition.
AB This paper tests for price patterns in retail gasoline markets consistent with those predicted by models of implicit collusion among firms. Recent supergame models show that the highest supportable collusive price is a function of today's profit relative to expected future profit: collusive prices are higher when predictable changes in demand or cost lead firms to expect that collusive profits are increasing rather than

declining. Ceteris paribus, collusive profits will be expected to increase when demand is expected to increase and/or costs are expected to decline. Using panel data on sales volume, and retail and wholesale prices in 59 cities over 72 months, we find results consistent with these predictions. Controlling for current demand and input price, the elasticity of current retail margins with respect to expected next-month demand is about 0.38. The elasticity of current margins with respect to next-month wholesale price is about -0.32. The results are inconsistent with inventory effects.

TI   Dynamic   Pricing   in   Retail   Gasoline   Markets.
AU   Borenstein, Severin; Shepard, Andrea.

Shome, Parthasarathi
PD   December 1993. **TI**   The Taxation of High Income Earners.   **AA**   International   Monetary   Fund. **SR**   International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/93/19; International Monetary Fund, Washington, DC 40231. **PG**   20. **PR**   not available. **JE**   H24, H22, H31. **KW**   Income Tax. Marginal Tax Rates. **AB**   The 1980's trends were to lower marginal personal income tax rates, scale down rate structures, and apply the highest rate a lower levels of per capita GDP. In the 1990's, driven by fiscal deficits and unemployment, and difficulty in linking high marginal rates to low incentives or revenue productivity, tax authorities are again demonstrating an interest in increasing marginal rates. This will burden those who are correctly paying the tax. Instead, equity and revenue productivity should be improved through minimum taxes, presumptive taxes, adequate inclusion of capital income in the tax base, revitalization of property taxes, and selected luxury taxes.

Shubert, J. Janelle
PD   November 1993. **TI**   A Communications View of Public Deliberations or "A Funny Thing Sometimes Happens on Our Way to the Forum." **AA**   Harvard University. **SR**   John F. Kennedy School of Government Discussion Paper: R93-35; Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138. **PG**   20. **PR**   no charge. **JE**   D71, D72, D73. **KW**   Communication Theory. Debate. Public Hearings. **AB**   This paper proposes a communication theory and research perspective for drawing distinctions among and between the many events in the political domain that carry the label "public deliberation". The paper takes the view that failure to make this distinction--to carefully define the deliberative process--glosses over the differences in expectations created, the behaviors supported and performed and outcomes produced by such disparate activities as public testimony, hearings, debates, roundtables and referendum. The paper presents a definition of deliberation as an ongoing, interactive process within the larger policy-making process and argues that while citizen involvement in the larger process of policy making has traditionally   focused   on   very   narrowly   proscribed communication (essentially linear, adversarial forms of discussion), the process offers abundant opportunities for citizens to engage in both discussion and dialogue.

Sibert, Anne
PD   October 1993. **TI**   Government Finance in a Model of Currency Substitution. **AU**   Sibert, Anne; Liu, Lihong. **AA**   Sibert: International Monetary Fund and University of Kansas. Lihong: University of Kansas. **SR**   International

Monetary Fund Working Paper: 93/80; International Monetary Fund, Washington, DC 20431. **PG**   18. **PR**   not available. **JE**   F36. **KW**   Seignorage   Taxation.   Money   Growth. Currency Substitution. **AB**   Our model is a variant of the cash-in-advance model. Goods must be purchased in the seller's currency, but currency may be traded before shopping at a cost. This cost is a measure of substitutability. The model is applied to seignorage taxation. We show that optimal money growth is positive and increasing in substitutability if and only if first and second-period consumption are gross substitutes. If governments act independently, money growth is suboptimally low if currencies are sufficiently substitutable and too high otherwise.

Sickles, Robin C.
TI   Competition, Market Niches, and Efficiency: A Structure Model of the European Airline Industry. **AU**   Roller, L. H.; Sickles, Robin C.

TI   Stochastic   Frontiers: A   Semiparametric   Approach. **AU**   Park, Byeong; Sickles, Robin C.; Simar, Leopold.

Siconolfi, Paolo
TI   Equilibrium   with   Incomplete   Financial   Markets: Uniqueness   of   Equilibrium   Expectations   and   Real Indeterminacy. **AU**   Pietra, T.; Siconolfi, Paolo.

TI   Generic Existence of Competitive Equilibria When the Asset Market is Incomplete: A Symmetric Argument. **AU**   Polemarchakis, Heracles M.; Siconolfi, Paolo.

Silber, William L.
PD   August 1993. **TI**   Technical Trading: When It Works and When It Doesn't. **AA**   New York University. **SR**   New York University Salomon Brothers Working Paper: S-93-49; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG**   12. **PR**   not available. **JE**   G14, E58. **KW**   Market Inefficiency. Central Banks. Short-Term Interest Rates. **AB**   Now that the notion of market inefficiency has become somewhat more fashionable, technical trading is making a comeback. The most convincing argument against the continued success of technical rules it that the process of exploiting the abnormal returns destroys the trading rule. But this does not seem to be the case in foreign exchange markets. Some have conjectured that foreign exchange is different from other markets because under the system of managed floating exchange rates, central banks spend money trying to smooth price fluctuations. If technical trading works in foreign exchange markets because of government intervention, then it might also work in trading short term interest rates. Moreover, if that were the only reason for the success of technical trading, then technical trading should not work in markets without significant government intervention. This study tests these conjectures by simulating the profitability of the popular moving average trading rule as applied to futures contracts on foreign currencies and short-term interest rates.

Simar, Leopold
TI   Stochastic   Frontiers: A   Semiparametric   Approach. **AU**   Park, Byeong; Sickles, Robin C.; Simar, Leopold.

Simpson, John David
PD October 1993. **TI** The Antitrust Implications of Entry by Small-Scale Hospitals. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 203; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 19. **PR** no charge. **JE** L40, I10. **KW** Hospitals. Entry. Scale Economies.
AB Of the thirty-five general acute care hospitals that have recently opened or soon will open in California, twenty-one have fewer than 100 beds. Some of these hospitals appear to be full-service general acute hospitals entering urban and suburban areas where they must compete with larger hospitals. Entry by these hospitals suggests that sub-100 bed hospitals can efficiently provide at least some inpatient acute services. Some of the other sub-100 bed hospitals are an outgrowth of outpatient surgery centers and provide only a subset of the services provided at a full-service general acute care hospitals. Entry by these hospitals suggests that competitive conditions and entry conditions may now vary substantially across the range of inpatient acute care. If this is the case, then grouping separate acute care services into a broad cluster market may no longer simplify antitrust analysis of hospital mergers.

Skinner, Jonathan
PD November 1993. **TI** Is Housing Wealth a Sideshow? **AA** University of Virginia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4552; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** $5.00. **JE** D91, E21, J14. **KW** Household Wealth. Home Ownership. Savings. Consumption. Aging.
AB Do housing price fluctuations play an important role in the economic security of retirees, or is housing wealth just a sideshow to the determination of consumption and saving? Using panel data on saving from the Panel Study of Income Dynamics, and aggregate time-series data, I find that shifts in housing wealth do affect consumption and saving, especially for younger households. On the other hand, few elderly households appear to be tapping into their housing windfalls to finance retirement consumption. The precautionary saving approach can explain this puzzle. If housing wealth rises, households require less insurance against future contingencies, and will respond by spending more out of (nonhousing) wealth. But not every elderly household encounters a bad outcome requiring the liquidation of household equity. Hence the median elderly family will not actively spend housing windfalls. The theoretical and empirical results therefore suggest that housing wealth is not a sideshow.

Skott, Peter
TI Michael Porter's Inquiry Into the Nature and Causes of the Wealth of Nations - The Challenge to Academic Economics. **AU** Auerbach, Paul; Skott, Peter.

PD January 1994. **TI** Cumulative Causation and the "New" Theories of Economic Growth. **AU** Skott, Peter; Auerbach, Paul. **AA** Skott: University of Aarhus. Auerbach: Kingston University. **SR** Aarhus Institute of Economics Memo: 1994-9; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 19. **PR** no charge. **JE** O41, O11, O30. **KW** New Growth Theory. Increasing Returns. Institutional Change.

AB Increasing returns and endogenous growth rates have a long history within heterodox traditions, but the "new" theories of growth have formalized and refined some conceptualizations in this area. This paper considers some aspects of the recent literature in the light of the older traditions. Using a simple Kaldorian model of uneven development as a reference point, it is argued (i) that new growth theory fails to capture crucial insights of the heterodox tradition, (ii) that divergent growth rates lead to political intervention and institutional change, and (iii) that the empirical work on "convergence" is marred by a failure to consider the possible effects of induced structural change on the observed growth pattern.

PD January 1994. **TI** On the Modelling of Systemic Financial Fragility. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1994-11; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 26. **PR** no charge. **JE** E32, E44, G30. **KW** Financial. Instability. Minsky Cycles. Non-Linear Cycles.
AB According to Minsky's "financial instability hypothesis" the interaction between financial and real factors destabilize a capitalist market economy generating irregular patterns of fluctuations and crisis. This paper formalizes Minsky's argument by adding financial considerations to standard macroeconomic models. It is shown that under certain conditions these extended models yield fluctuations of the kind suggested by Minsky. The introduction of financial factors may destabilize an otherwise stable system and produce cycles or, in some cases, a complete breakdown of the economy.

PD March 1994. **TI** Financial Innovation, Deregulation and Minsky Cycles. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1994-8; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 25. **PR** no charge. **JE** E32, E44, G10. **KW** Financial Instability. Financial System. Non-Linear Cycles.
AB Spectacular changes in financial markets in the 1980's and 1990's have led to widespread concern about the stability of the financial system. This paper (i) considers some aspects of the observed changes in the financial sphere, (ii) argues that Minsky's work on "systemic financial fragility" offers a useful perspective on the evolution of the financial system, and (iii) presents a simple formalization of Minsky's theory. It is shown how the introduction of financial variables into otherwise stable models may destabilize the system: the interaction between financial conditions and the real sector will, under certain conditions, generate recurrent crises and reduce the average growth rate of the economy.

Smith, Pamela J.
PD December 1993. **TI** Geographic Scale Economies in an Endowments-Based Trade Model: An Empirical Analysis of the U.S. States. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper:93-16; Department of Economics, University of Delaware, Newark, DE 19716. **PG** 24. **PR** not available. **JE** F10, F12, F14. **KW** Trade. Geographic Scale Economies. Heckscher-Ohlin Theory.
AB This paper is an empirical analysis of the determinants of trade. It applies Heckscher-Ohlin theory to disaggregated cross-section data on U.S. state exports of manufactures to foreign destinations. It then modifies the Heckscher-Ohlin

framework to identify the distinct effects of endowments, and of scale economies, on trade. A method for detecting geographic scale economies in the disturbance term of the endowments-based trade model is introduced. Empirical findings show that capital confers a comparative advantage in a variety of manufactures, patents and highly-educated labor are sources of comparative advantage in durables industries and disadvantage in nondurables industries, and labor with no formal education confers comparative advantage in many of the manufacturing industries. Findings also provide evidence that geographic scale economies determine trade supplemental to endowments.

Somers, Harold M.

PD January 1994. TI Changing the Locks on Capital Gains. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 708; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 26. PR $5.00. JE H22, H21, H31, H32. KW Lock-In. Capital Gains Tax. Taxation.
AB The tax provisions covering capital gains are known to cause a "lock-in" in the sense of a delay in selling an appreciated asset. The 1993 deficit-reduction act adds a new incentive to hold by providing a 50% cut in the tax when an investment in certain businesses is held five years or longer. The reduction is from a top rate of 28% to 14%. The reduced rate tends to weaken the lock-in but the long holding period required to win this rate tends to strengthen it, with detrimental effects, it is here argued, on the liquidity of capital and the optimum allocation of resources. The locks have simply been changed. It would be far better to go immediately to a 14% rate after one year than to delay it for five years. This would reduce the prevailing lock-in without introducing a new one. The 1993 act also failed to deal with two aspects of the taxation of capital gains that are crying for attention: (1) the taxation of inflation-bloated gains; and (2) the calculation of taxable gain only when realization occurs. Both lacks contribute to the lock-in.

Sorensen, Bent E.

TI GMM Estimation of a Stochastic Volatility Model: A Monte Carlo Study. AU Andersen, Torben G.; Sorensen, Bent E.

Spencer, Michael G.

TI The Role of Financial Institutions in the Transition to a Market Economy. AU Blommestein, Hans J.; Spencer, Michael G.

Sridharan, R.

PD July 1993. TI The Capacitated Plant Location Problems: A Survey. AA Monash University. SR Monash Department of Econometrics Research Working Paper: 7/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 38. PR no charge. JE C61, C63, C44. KW Location Problem. Heuristics.
AB In this paper we provide a comprehensive survey of a class of plant location problems. We cover both heuristic and exact procedures that have appeared in the literature. The survey also covers three decades of work on the capacitated plant location problem.

Staiger, Robert W.

TI Multilateral Tariff Cooperation During the Formation of Customs Unions. AU Bagwell, Kyle; Staiger, Robert W.

Stavins, Robert N.

TI Environmental Regulation and International Competitiveness: What Does the Evidence Tell Us? AU Jaffe, Adam B.; Peterson, Steven R.; Portney, Paul R.; Stavins, Robert N.

TI Prices, Regulation, and Energy Conservation. AU Jaffe, Adam B.; Stavins, Robert N.

Stein, Ernesto

TI Continental Trading Blocs: Are they Natural, or Super-Natural? AU Frankel, Jeffrey A.; Stein, Ernesto.; Wei, Shang-Jin.

Stein, Jerome L.

PD March 1994. TI The Natural Real Exchange Rate of the U.S. Dollar and Determinants of Capital Flows. AA Brown University. SR Brown University Department of Economics Working Paper: 94-7; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 44. PR no charge. JE F31, F32, F34, F41, F43. KW Capital Movements. Current Account. Purchasing Power Parity.
AB The aim of this chapter is show to what extent the NATREX model can be used to answer the following (Q) questions, concerning the real international value of the U.S. dollar and current account. (Q1) To what extent has the real exchange rate of the U.S. dollar been as stable as is justified by the "fundamentals." What are the fundamentals? What factors can explain the persistent and large deviations from purchasing power parity? Can we calculate whether the U.S. dollar is over or undervalued? (Q2) How do international financial markets affect the responses of the U.S. economy to internal and external disturbances? What are the determinants of capital mobility? (Q3) What has produced the U.S. current account deficits? What policies could be adopted to reverse them? What are the long run effects of government budget deficits upon the trade balance?.

TI The Dynamics of the Real Exchange Rate and Current Account in a Small Open Economy: Australia. AU Lim, Guay C.; Stein, Jerome L.

PD March 1994. TI International Finance Theory and Empirical Reality. AA Brown University. SR Brown University Department of Economics Working Paper: 94-9; Department of Economics, Brown University, Providence, Rhode Island 02912. PG 28. PR no charge. JE F31, F32, F34, F41, F43. KW Exchange Rate. Capital Movements. Purchasing Power Parity.
AB We have developed the NATREX approach because of the serious problems with the contemporary models. An evaluation of these contemporary models provides the justification for taking a different approach. This appendix summarizes the underlying rationale of these models and shows why economists have been so disappointed in their ability to explain the determination of exchange rates and capital flows. (Q1) Have exchange rates been as stable as the macroeconomic fundamentals? What are these fundamentals? If there has been "excess volatility", what has produced it? (Q2) What determines the real exchange rate? (Q3) Has the purchasing

power parity (PPP) theory been valid under floating rates? Do deviations from PPP indicate over or undervaluation of a currency? (Q4) Are variations in real exchange rates caused by changes in the fundamentals or merely by noise? (Q5) Are variations in nominal exchange rates explained primarily by monetary factors that produce changes in relative nominal prices or also by real disturbances that change the equilibrium real exchange rate?.

Stole, Lars A.

PD May 1993. **TI** Organizational Design and Technology Choice with Nonbinding Contracts. **AU** Stole, Lars A.; Zwiebel, Jeffrey. **AA** Stole: University of Chicago. Zwiebel: Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1255; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 37. **PR** no charge. **JE** D23, C78, J30. **KW** Labor Bargaining. Contracts. Organizational Design. Shapley Value.
AB We present a new methodology for studying the general problem of labor contracting within a firm's boundaries where contracts provide only a minimal commitment to wages and employment. Given the peculiar contractual incompleteness of labor contracts, the resulting wages and profits under a large class of complete information bargaining games distort the technological and organizational decisions facing the owner of the firm's capital. We show that in such settings where firms consist of a nexus of nonbinding labor contracts, these decisions are distorted in an economically distinct way compared to the standard neoclassical firm. Among other things, we demonstrate that a firm with a nonbinding contractual basis will, relative to a neoclassical firm, (i) overemploy labor, (ii) underemploy capital, (iii) choose inefficient "frontload" technologies, (iv) de-emphasize scale and scope economies, and (v) inefficiently allocate labor across productive assets. We apply our analysis to product market competition, unionization, hierarchical management, and horizontal mergers.

Stratton, Leslie S.

TI Housework, Effort and Wages of Married Workers. **AU** Hersch, Joni; Stratton, Leslie S.

TI Housework, Wages, and the Division of Housework Time for Employed Spouses. **AU** Hersch, Joni; Stratton, Leslie S.

Subrahmanyam, Marti G.

PD September 1993. **TI** Pricing and Hedging American Options: A Unified Method and its Efficient Implementation. **AU** Subrahmanyam, Marti G.; Yu, G. George. **AA** Subrahmanyam: New York University. Yu: J. P. Morgan Securities, Inc. **SR** New York University Salomon Brothers Working Paper: S-93-52; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 27. **PR** not available. **JE** G13. **KW** Option Pricing. Contingent Pricing.
AB In this paper, we present a unified method for pricing and hedging American options along with an efficient implementation procedure. The unified analytic valuation formula obtained applies to a wide range of American options for which there is a proportional cost of carrying the underlying security. The proposed valuation formula and its implementation procedure offer a number of advantages over other numerical approximation methods in the literature. In

particular, they are efficient and accurate in computing both option values and various option hedge parameters, and are useful for American options risk management system. We demonstrate the accuracy of this numerical implementation method in relation to other approaches and employ it in the pricing and hedging of a variety of American-style options contracts: American options on stocks; American options on futures contracts; Asian-American options with a geometric average; two types of American Quanto options.

Sultan, Jahangir

TI Program Trading, Non-Program Trading and Market Volatility. **AU** Hogan, Kedreth C.; Kroner, Kenneth F.; Sultan, Jahangir.

Sutherland, Holly

TI Comparing Low Incomes in France and the United Kingdom: Evidence From Household Expenditure Surveys. **AU** Atkinson, A. B.; Gardiner, Karen; Lechene, Valerie; Sutherland, Holly.

Svensson, Lars E. O.

PD November 1993. **TI** Term, Inflation, and Foreign Exchange Risk Premia: A Unified Treatment. **AA** Stockholm University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4544; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** E43, G10, G13. **KW** Forward Markets. Interest Rates. Risk Premia.
AB The paper reviews the theoretical foundations of the use of forward interest rates to infer expected future rates of interest, inflation, currency depreciation and inflation differentials. Forward rates are related to these expected future variables via combinations of term, inflation and foreign exchange risk premia. A unified derivation, discussion and comparison of these premia is provided under both general and specific assumptions, as well as some comments on empirical estimation.

Swagel, Phillip

PD November 1993. **TI** Union Behavior, Industry Rents, and Optimal Policies. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 459; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 43. **PR** no charge. **JE** F12, F13, J51. **KW** Labor Rent. Strategic Trade Policy. Capacity Utilization.
AB This paper examines the welfare gains from strategic trade and industrial policy in the U.S. steel industry, focusing particularly on the potential gains from capturing labor rents. I take into account product market distortions such as price-setting firms, factor market distortions in the form of union-created labor rents, and the presence of fixed capital and underutilized capacity in U.S. steel production. The existence of underutilized capacity means that firms respond to protection by reducing the share of labor in production, eliminating the rents targeted by the policy and thus reducing the potential gains. At the same time, the union takes advantage of protection to "skim off" rents, further reducing the effectiveness of the optimal policy. Taking into account these endogenous responses substantially reduces the welfare gains from optimal

policies. And simply reducing domestic labor market distortions results in a welfare gain nearly as large as that from optimal policies. This suggests that the focus on labor rents as the subject of U.S. trade and industrial policy is overstated, at least in manufacturing industries such as integrated steel.

Swedenborg, Birgitta
TI The High Cost of Eating: Agricultural Protection and International Differences in Consumer Food Prices. AU Lipsey, Robert E.; Swedenborg, Birgitta.

Sweeney, Richard J.
TI Noise: The Case of the Market for Bankrupt Firms' Securities. AU Eberhart, Allan C.; Sweeney, Richard J.

Symansky, Steven
TI The Impact of Worldwide Military Spending Cuts on Developing Countries. AU Bayoumi, Tamim, Hewitt, Daniel; Symansky, Steven.

Szulanski, G.
PD not available. TI Intra-Organizational Transfer of Best Practice: Predicting Difficulties. AA INSEAD. SR INSEAD Working Papers: 93/88/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 34. PR not available. JE L20, L23. KW Best Practice. Transfer Process. Organizational Difficulties.
AB Why might best practice not transfer? This paper attempts to answer this question by addressing three subsidiary ones: 1) How does best practice transfer? 2) How may difficulties manifest themselves during a transfer? 3) What are the origins of difficulty in transferring best practice within inside the firm? The suggested answers to these three questions delineate a framework that could be used to systematically predict the sources of difficulty in transferring best practice within the firm. One concrete model is constructed out of this framework based on the observation that different sources of difficulty may operate at different stages of the transfer process. From the resulting model, four testable propositions are advanced about the dominant or paramount sources of difficulty at each stage of the transfer.

PD not available. TI Appropriative Capabilities: Appropriating Rents from Existing Scarce Assets. AA INSEAD. SR INSEAD Working Papers: 93/91/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 28. PR not available. JE L21, D21. KW Appropriation Failure. Appropriation Process. Competitive Advantage.
AB Why firms may fail to appropriate rents from their existing stock of scarce assets? To answer this question it is useful to first understand how firm appropriate rents from their existing stock of scarce assets, i.e. the appropriation process. A conceptual model of the appropriation process permits, in turn, to derive a typology of appropriation failures. Finally this typology of appropriation failures can be used to derive the concept of appropriative capabilities. In this paper, the concept of appropriative capabilities is derived following this path. The conclusion is that a firm exhibits appropriative capabilities to the extent that it possess competence in: (1) minimizing the likelihood of unanticipated erosion, i.e. of unexpected imitation and of unexpected substitution; (2) reducing slack; and (3)

minimizing the extent of holdup. A research agenda is then suggested, and broader implications for the resource based view of competitive advantage are outlined.

Taylor, Nick
TI A Cross-Section Test of the Present-Value Model for U.S. Stock Prices. AU Bulkley, George; Taylor, Nick.

Terlizzese, Daniele
TI Dissaving by the Elderly, Transfer Motives and Liquidity Constraints. AU Ando, Albert; Terlizzese, Daniele; Guiso, Luigi.

Tesar, Linda L.
TI Supply-Side Economics in an Integrated World Economy. AU Mendoza, Enrique G.; Tesar, Linda L.

Thierry, M. C.
PD not available. TI Strategic Production and Operations Management Issues in Product Recovery Management. AU Thierry, M. C.; Salomon, M.; Van Nunen, J.; Van Wassenhove, L. N. AA Thierry, Salomon, and Van Nunen: Erasmus University. Van Wassenhove: INSEAD. SR INSEAD Working Papers: 93/81/TM/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 18. PR not available. JE M11, L64. KW Waste Reduction. Production Management. Durable Products.
AB This paper is about product recovery management (PRM) for manufacturers of durable products. PRM encompasses the management of all used and discarded products, components, and materials for which a manufacturing company is legally, contractually, or otherwise responsible. The objective of PRM is to recover as much of the economic (and ecological) value of used and discarded products, components, and materials as reasonably possible, thereby reducing the ultimate quantities of waste to a minimum. The focus of this paper is on strategic production and operations management issues in PRM. The paper discusses the relevance of PRM to durable products manufacturers. It contains a categorization of PRM decisions. A case study based on the PRM system of a multinational copier manufacturer is presented to illustrate a set of specific production and operations management issues. Experiences of two other pro-active manufacturers, i.e. BMW and IBM, are briefly discussed. Finally, the paper considers managerial implications of PRM, and suggests a number of topics for further research.

Thisse, Jacques-Francois
TI Location on Networks. AU Labbe, Martine; Peeters, Dominique; Thisse, Jacques-Francois.

Thomas, Alun H.
PD November 1993. TI Expected Devaluation and Economic Fundamentals. AA International Monetary Fund. SR International Monetary Fund Working Paper: 93/83; International Monetary Fund, Washington, DC 20431. PG 19. PR not available. JE F31. KW Devaluation. Exchange Rates. Fundamentals. Interest Rate Differentials.
AB Recent incidents of exchange rate collapse have provoked interest in the extent to which such events are determined by economic fundamentals. This paper considers whether interest rate differentials are appropriate measures of

the risk of devaluation and whether this measure of devaluation risk reflects the movements of variables which capture internal and external balance. The paper finds that interest rate differentials reflect devaluation risk but that movements in fundamental variables have only a weak effect on devaluation risk in France and Italy. The most significant influence on devaluation risk is the position of a currency in its band in that the lower is the exchange value of a currency within the band, the greater is the perceived risk of devaluation.

Tobin, James
PD   October 1993. TI   The Natural Rate as New Classical Macroeconomics. AA   Yale University. SR   Yale Cowles Foundation Discussion Paper: 1061; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. PG   14. PR   no charge. JE   E10, E12, E13, E24. KW   Unemployment. Frictional Unemployment. Adjustment Dynamics.
AB   Friedman identified his "natural rate" as Walrasian equilibrium. Keynes's "full employment" is also classical equilibrium: labor markets are clearing at existing real wages. Why is equilibrium unemployment not zero? Keynes and Friedman cite, but do not explain, "frictional" unemployment. They differ on what explains cycles. Friedman and Lucas answer: misperceptions of inflation. Markets clear at wrong prices and quantities. Today New Classicals stress variations in the natural rate itself. In Keynesian cycles markets don't clear. Excess supplies or demands trigger Phillips-curve movements of wages and prices. Unemployment and vacancies coexist in varying proportions because inter-sectoral shocks always occur. Adjustment dynamics, not representative-agent equilibria, determine the economy's behavior at NAIRU and other unemployment rates. Money makes a difference, not because of money illusions or misperceptions but because adjustments begin with nominal wage and price responses. Written for Red Cross, "The Natural Rate Hypothesis 25 Years On.".

Tran, Hong-Anh
TI   Cointegration, Seasonality, Encompassing, and the Demand for Money in the United Kingdom. AU   Ericsson, Neil R.; Hendry, David F.; Tran, Hong-Anh.

Tremayne, A. R.
TI   Trend Stationarity in Time Series. AU   Leybourne, S. J.; McCabe, B. P. M.; Tremayne, A. R.

Triest, Robert K.
PD   November 1993. TI   The Efficiency Cost of Increased Progressivity. AA   University of California, Davis. SR   University of California at Davis Economics Department Working Paper: 93-22; Department of Economics, University of California at Davis, CA 95616-8578. PG   24. PR $3.00 U.S. and Canada. $4.00 International. JE   H21, H24. KW   Income Tax. Tax Progressivity. Labor Supply.
AB   Increases in income tax progressivity generally entail some efficiency cost due to increased distortion of individuals' labor supply decisions. This paper quantifies the magnitude of the efficiency cost of several policies which would increase the progressivity of the U.S. individual income tax. The analysis differs from previous work on this topic in allowing for complex nonlinear tax schedules similar to those which actually exist. The efficiency cost of increased progressivity is found to vary considerably with the type of tax reform

considered. Expanding the earned income tax credit (EITC) is found to be a particularly efficient means of increasing progressivity. Using the labor supply parameters I consider most reasonable, I find that the efficiency cost of expanding the EITC financed by increased tax rates in the intermediated brackets is less than 20 cents per dollar transferred from the upper income groups to the lower income groups.

Tsiddon, Daniel
TI   Human Capital Distribution, Technological Progress, and Economic Growth. AU   Galor, Oded; Tsiddon, Daniel.

Tuckman, Bruce
TI   Private vs. Public Lending: Evidence from Covenants. AU   Kahan, Marcel; Tuckman, Bruce.

TI   Optimal Call Policy for Corporate Bonds. AU   Longstaff, Francis A.; Tuckman, Bruce.

Tullock, Gordon
PD   1993. TI   Thoughts on Private Roads. AA   University of Arizona. SR   University of Arizona Economics Working Paper: 93-6; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. PG   12. PR $2 Canada and U.S.; $3 Overseas by air. JE   H54, H41, L33. KW   Road System. Privatization. Toll Roads.
AB   Some economists believe that all, or at least a good many roads could be privatized. This paper looks into the problem, pointing out that at the very least privatization would require fairly radical changes in real estate law.

Udell, Gregory
TI   Bank Off-Balance Sheet Financial Innovations. AU   Jagtiani, Julapa; Saunders, Anthony; Udell, Gregory.

Ulph, Alistair
PD   October 1993. TI   Environmental Policy and International Trade when Government and Producers Act Strategically. AA   University of Southampton. SR   University of Southampton Discussion Paper in Economics and Econometrics: 9318; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. PG   30. PR   no charge. JE   F12, F13, Q28, H23. KW   Strategic Behavior. Ecological Dumping.
AB   Environmentalists often express concern that the international trading system may damage the environment because governments will be tempted to favor their domestic industries through the setting of emission targets which are laxer than would be the case in the absence of such considerations. Clearly some claims only make sense in a world of imperfect competition where there are strategic gains from trying to manipulate markets. First I show that when only governments act strategically the use of environmental taxes will induce more strategic behavior by governments (i.e. laxer environmental targets) than will the use of standards. Second I show that when both governments and producers act strategically the fact that producers are acting strategically causes governments to mitigate, but not eliminate, the extent of their strategic behavior. However, while emissions are not as high when both parties act strategically as when only governments act strategically, welfare is lower when both act strategically that when only party acts strategically, so welfare losses are compounded.

Van Der Linden, B.
TI Examining the Econometric Relevance of Discretizing Panel Data: An Application to the Belgian Labour Market. **AU** Cahuzac, E.; Mouchart, M.; Van Der Linden, B.

Van Hoa, Tran
PD March 1993. **TI** Reparameterization and Estimation in Unit Root Equations. **AA** Wollongong University and Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9324; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 6. **PR** not available. **JE** C13, C22, C32. **KW** Unit Roots. Reparameterization. Estimation.
AB Reparameterization is common in econometrics with early examples in the form of Koyck transformations that started in the 1950's. Reparameterization can produce interesting models for estimation and inference. The paper specifically looks at reparameterization in unit root equations, and provides some results of OLS and improved estimation for comparative purposes. Surprisingly, the dominance of the positive Stein-rule and 2SHI estimators over OLS uniformly holds in the level case, and more so in the difference case. The implication is that, for estimation of unit root equations, OLS is suboptimal.

Van Nunen, J.
TI Strategic Production and Operations Management Issues in Product Recovery Management. **AU** Thierry, M. C.; Salomon, M.; Van Nunen, J.; Van Wassenhove, L. N.

Van Wassenhove, L. N.
TI Strategic Production and Operations Management Issues in Product Recovery Management. **AU** Thierry, M. C.; Salomon, M.; Van Nunen, J.; Van Wassenhove, L. N.

TI Single Machine Scheduling with Set-Ups to Minimize the Number of Late Items: Algorithms, Complexity and Approximation. **AU** Kovalyov, M. Y.; Potts, C. N.; Van Wassenhove, L. N.

TI Exact and Approximation Algorithms for the Tactical Fixed Interval Scheduling Problem. **AU** Kroon, L. G.; Salomon, M.; Van Wassenhove, L. N.

Vanderbeck, Francois
TI A Tactical Planning Model for Mixed-Model Electronics Assembly Operations. **AU** Balakrishnan, Anantaram; Vanderbeck, Francois.

Vanhonacker, W.
PD December 1993. **TI** A New Brand Choice Model Incorporating a Choice Set Formation Process. **AA** INSEAD. **SR** INSEAD Working Papers: 94/03/EPS/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 31. **PR** not available. **JE** D11, D12, D81, D83. **KW** Choice Set Generation. Brand Selection. Random Utility.
AB This paper develops an individual-level choice model which embeds a rational choice set generation process. The choice set generation process is motivated by a goal-derived categorization paradigm where consumers make uncertain judgments about the ability of brands to meet the consumption or usage goal motivating the choice decision. Recognizing this uncertainty, brand selection is modeled as a decision under uncertainty within a random utility framework. The modeling of the process builds on previously suggested formalizations based on search-theory and decision costs. Derivations are provided for a flexible and parsimonious representation of the choice probabilities which are characterized neither by IIA nor the regularity property. Some initial empirical results using scanner data are reported.

Vannini, Stefano
TI Tariff Policy and Multinational Firms: How to Jump Tariff Jumping. **AU** Cordella, Tito; Vannini, Stefano.

Varetto, Franco
TI Corporate Distress Diagnosis: Comparisons Using Linear Discriminant Analysis and Neural Networks (The Italian Experience). **AU** Altman, Edward I.; Marco, Giancarlo; Varetto, Franco.

Venables, Anthony
TI Integration, Specialization, and Adjustment. **AU** Krugman, Paul; Venables, Anthony.

Venkatraman, N.
TI Interorganizational Relationships and Information Technology: A Conceptual Synthesis and a Research Framework. **AU** Bensaou, M.; Venkatraman, N.

Vermaelen, T.
TI Market Underreaction to Open Market Share Repurchases. **AU** Ikenberry, D.; Lakonishok, J.; Vermaelen, T.

Vohra, Rajiv
TI Non-Cooperative Implementation of the Core. **AU** Serrano, Roberto; Vohra, Rajiv.

Voith, Richard
PD November 1993. **TI** Does City Income Growth Increase Suburban Income Growth, House Value Appreciation, and Population Growth? **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 93-27; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 24. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** R11, R31, O18, O15, C51. **KW** Suburbs. Suburban Growth. City Growth.
AB In this paper we examine the relationship between city and suburban growth over the last three decades for a sample of U.S. metropolitan areas. We present a simple theoretical framework that provides a rationale for complementarity between city and suburbs and then, using census data, we provide evidence for the complementarity of city and suburban economies. Simple correlations of city and suburban population growth, per capita income growth, and growth in house values are significantly positive and have been rising over time, despite decentralization. Because raw correlations might arise from common trends affecting cities and suburb's we specify a structural model that relates city income growth to suburban growth in income, population, and house values. The

model is a system of equations that is complicated by the existence of unobserved latent variables that affect both city and suburb. Estimation results are consistent with the hypothesis that city income growth enhances suburban growth.

Volij, Oscar
TI   A Non-Cooperative View of Consistent Bankruptcy Rules. AU   Dagan, Nir; Serrano, Roberto; Volij, Oscar.

Von Ungern-Sternberg, Thomas
PD   November 1993. TI   Das Neue Kartellgesetz: Eine Kritische   Wurdigung.   AA   Universite   de   Lausanne. SR   Universite   de   Lausanne,   Cahiers   de   Recherches Economiques: 9310;   Departement   d'Econometrie   et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. PG   14. PR   no charge. JE   K21, L40. KW   Anti-Trust Law. Anti-Trust Policy.
AB   Switzerland enacted an anti-trust law in 1985. Already a revision to that law has been introduced. What were the failures of the original law which needed to be addressed? The paper takes a critical look at the proposed revision from an economic perspective. What are its weaknesses? Although the paper takes a critical approach, the intent is not to condemn the new legislation. On the contrary, the revision is a step in the right direction. The paper is written in German.

PD   January 1994. TI   Countervailing Power Revisited. AA   Universite de Lausanne. SR   Universite de Lausanne, Cahiers de Recherches Economiques: 9401; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne,   BFSH1   -   Dorigny,   CH-1015   Lausanne, SWITZERLAND. PG   16. PR   no charge. JE   L20, L40. KW   Bargaining. Countervailing Power.
AB   The paper studies the predictions of the theory of countervailing power within two theoretical models, a Cournot model and a model of perfect competition. Within the Cournot model a decrease in the number of retailers unambiguously leads to an increase in equilibrium consumer prices. In the model of perfect competition the reverse is true. One may thus conclude that countervailing power can have positive effects for the consumers only if competition at the retail level is very fierce.

Waldfogel, Joel
TI   The Effect of Conviction on Income Through the Life Cycle. AU   Nagin, Daniel; Waldfogel, Joel.

Wang, Yong
TI   Bayesian Learning and Overlapping Generations. AU   Bertocchi, Graziella; Wang, Yong.

Wascher, William
TI   Employment Effects of Minimum and Subminimum Wages: Reply to Card, Katz and Krueger. AU   Neumark, David; Wascher, William.

Wei, Shang-Jin
PD   November 1993. TI   Love and Hate: State and Non-State Firms in Transition Economies. AU   Wei, Shang-Jin; Lian, Peng. AA   Harvard University. SR   John F. Kennedy School of Government Discussion Paper: R93-40; Harvard University, 79 John F. Kennedy Street, Cambridge, MA 02138.

PG   24.   PR   no   charge.   JE   O53,   O11,   P27. KW   Economic Transition. China.
AB   Using data on 43 Chinese cities, this paper studies the connection between the growth of non-state firms and the speed of closing down state-owned firms in transition economies. The hypothesis is that, at the beginning of a transition, a gradual closure of state firms, even if they are inefficient may help the growth of firms outside the state sector. Once the private sector is well established, there is a positive correlation between the growth of non-state firms and the initial size of the state sector. However, for cities with a significant presence of non-state firms, the correlation is negative. Furthermore, China's non-state sector is large enough that the presence of the state firms in most regions appears to be a drag on the further growth of firms outside the state sector.

TI   Continental Trading Blocs: Are they Natural, or Super-Natural? AU   Frankel, Jeffrey A.; Stein, Ernesto.; Wei, Shang-Jin.

PD   December 1993. TI   Open Door Policy and China's Rapid Growth: Evidence from City-Level Data. AA   Harvard University. SR   Harvard John F. Kennedy School of Government Discussion Paper: R93-41; John F. Kennedy School of Government, 79 John F.Kennedy Street, Cambridge, MA 02138. PG   33. PR   no charge. JE   O53, O11, F14, F21. KW   Foreign Investment. Economic Growth.
AB   There is clear evidence that between 1980-90 more exports were positively associated with higher growth rates across Chinese cities. In comparison, in the late 1980's, the contribution to growth came mainly from foreign investment. The contribution of foreign investment came in the form of technological and managerial spillover across firms as opposed to an infusion of new capital. Finally, there is nothing magic about the high growth rates of Chinese coastal areas other that their effective utilization of foreign investment and exports.

Weil, David N.
TI   The Gender Gap, Fertility, and Growth. AU   Galor, Oded; Weil, David N.

Weisbrod, Steven R.
TI   Asset Price Inflation in the 1980's: A Flow of Funds Perspective. AU   Hargraves, Monica; Schinasi, Garry J.; Weisbrod, Steven R.

Wellford, Charissa P.
PD   October 1993. TI   Antitrust: Results from the Laboratory. AA   Federal Trade Commission. SR   Federal Trade Commission Bureau of Economics Working Paper: 202; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. PG   not available. PR   no charge. JE   L40, L10, L20, K21, C90. KW   Antitrust. Laboratory Methods. Competition. Monopoly. Oligopoly. Market Power.
AB   Industrial organization issues that are relevant to antitrust have been studied in the laboratory for over three decades, and the results of this research offer useful insights for applied work in antitrust. Experimental methods provide a means for enhancing our understanding of markets. Those who advocate the relevance (or policy application) of a particular theory bear the burden of showing why the theory is appropriate. When a theory fails to predict well in a simple laboratory setting under conditions the theory itself suggests, it is difficult to believe that

it would predict better in a more complex market in the naturally-occurring economy. This paper summarizes how a market is created in the laboratory, discusses the applicability of laboratory methods (relative to traditional empirical/econometric methods) to various antitrust issues, and presents a brief survey of laboratory results that have implications for antitrust analysis.

Wets, Roger J.-B

TI Neighborhood Effects on Belief Formation and the Distribution of Education Income. **AU** Roemer, John E.; Wets, Roger J.-B.

White, Lawrence J.

PD not available. **TI** Competition Versus Harmonization: An Overview of International Regulation of Financial Services. **AA** New York University. **SR** New York University Salomon Brothers Working Paper: S-93-58; 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** 44. **PR** not available. **JE** G18, G15, F42. **KW** Policy Coordination. Financial Services.
AB In a world of increasingly globalized financial services markets, national regulation of financial services is under progressively greater strain. Not too surprisingly, many regulators are calling for greater international harmonization of financial services regulation. Using the frameworks of "market failure" and "government failure," we find that there are a limited number of instances in which harmonization may improve the efficiency of financial services markets but that competition - among national regulatory regimes as well as among firms - is generally the preferred direction for public policy.

Windmeijer, Frank A. G.

TI R-Squared Measures for Count Data Regression Models with Applications to Health Care Utilization. **AU** Cameron, A. Colin; Windmeijer, Frank A. G.

Winkler, R. L.

TI The Impact of Testing Errors on Value of Information: A Quality-Control Example. **AU** Gaba, A.; Winkler, R. L.

Winter, Eyal

TI The Partnered Core of a Game with Side Payments. **AU** Reny, Philip J.; Winter, Eyal; Holtz Wooders, Myrna.

Wise, David A.

TI The Military Pension, Compensation, and Retirement of U.S. Air Force Pilots. **AU** Ausink, John A.; Wise, David A.

Wizman, Thierry A.

TI What Moves the Discount on Country Equity Funds? **AU** Hardouvelis, Gikas A.; Wizman, Thierry A.; La Porta, Rafael.

Wolsey, Laurence A.

TI Capacitated Facility Location: Valid Inequalities and Facets. **AU** Aardal, Karen; Pochet, Yves; Wolsey, Laurence A.

Woo, Wing Thye

TI Structural Factors in the Economic Reforms of China, Eastern Europe and the Former Soviet Union. **AU** Sachs, Jeffrey D.; Woo, Wing Thye.

Wooders, John

PD December 1992. **TI** The Walrasian Equilibrium of Matching Models. **AA** University of Arizona. **SR** University of Arizona Economics Working Paper: 93-8; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. **PG** 21. **PR** $2 Canada and U.S.; $3 Overseas by air. **JE** D51. **KW** Competitive Equilibrium. Bargaining Model. Arrow-Debreu Markets.
AB This paper characterizes the competitive equilibria of markets that have been studied in models of matching and bargaining with discounting and with infinite entry. In contrast to Rubinstein and Wolinsky (1985) and Gale (1987), the Walrasian equilibrium of an Arrow-Debreu differentiated commodities market is taken as the competitive outcome. Rubinstein and Wolinksy ignore the possibility of substitution between periods. Gale ignores the differentiation of goods between periods and measures the differentiation of goods by the discount factor. We show that in the context of each of their models the outcomes they view as competitive coincide with the A-D competitive outcomes. We conclude that the type of market equilibrium found in Rubinstein and Wolinsky, when obtained in a matching and bargaining model of a market with exogenous entry, is not competitive in the Arrow-Debreu sense.

TI Coalition-Proof Equilibrium. **AU** Moreno, Diego; Wooders, John.

Woodford, Michael

TI Energy Taxes and Aggregate Economic Activity. **AU** Rotemberg, Julio J.; Woodford, Michael.

Wright, Brian D.

PD August 1993. **TI** Dynamic Perspectives on Agricultural Policy Issues. **AA** University of California, Berkeley. **SR** University of California, Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 687; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 24. **PR** $10.25. **JE** Q13, Q18. **KW** Agricultural Policies. Agricultural Prices.
AB In this paper I consider models of markets in which the dynamics run in two directions, forward from current conditions to expectations of future prices, and back from price expectations to current decisions. Both types of linkages can be crucial in competitive models of agricultural production, in which land has a prominent role as the quintessential fixed asset. A central challenge of market analysis from Waugh's time till now has been to infer from market observations whether markets are behaving in ways that could be improved upon with the help of public policy. When dynamic linkages are a two-way street, this question can be difficult, and errors in the direction of intervention can often seem as consistent with our economic intuition as they are pleasing to those who stand to gain therefrom. I consider agricultural supply makers and try to give some insights into how easily such misinterpretation can arise.

Yang, Tzu-Han

TI   Market Structure and International Trade: Business Groups in East Asia. AU   Feenstra, Robert C.; Yang, Tzu-Han; Hamilton, Gary G.

Yosha, Oved

PD   February 1994. TI   Privatizing Multi-Products Banks. AA   Brown University. SR   Brown University Department of Economics Working Paper: 94-4; Department of Economics, Brown University, Providence, Rhode Island 02912. PG   17. PR   no charge. JE   G21, L33, D43, L13, P11. KW   Privatization. Banking. Market Structure.
AB   In October 1983, following a stock market crash, the Israeli government became the owner of most of the banking system in the country. The government is now getting ready to privatize the banks. It has been argued that the government must take advantage of the unique opportunity to affect, in fact to mold, the structure of the banking system. Using a simple model of imperfect competition between multi-product banks, the paper evaluates two proposals which have been raised in this context. Implications for banking reforms in other countries are discussed.

Yu, G. George

TI   Pricing and Hedging American Options: A Unified Method and its Efficient Implementation. AU   Subrahmanyam, Marti G.; Yu, G. George.

Zajac, Edward E.

PD   1993. TI   Toward a Positive Theory of Regulation. AA   University of Arizona. SR   University of Arizona Economics Working Paper: 93-11; Department of Economics, Bldg #23, University of Arizona, Tucson, AZ 85721. PG   21. PR $2 Canada and U.S.; $3 Overseas by air. JE   D72, L51, I18, J26, D81. KW   Social Regulation. Rare Events. Decisions Under Uncertainty.
AB   This paper is a start at formulating a positive theory of "social" (health, safety, and environmental) regulation. The theory is based on six different effects: (1) the larger the organization, the higher is the probability that a rare event will befall it, (2) the strongly felt fairness notion that like cases should be treated in a like manner, (3) the tendency of legislative and regulatory bodies to respond to a specific incident with general laws and regulations, (4) the tendency of the public to overestimate the occurrence of rare events that have received a lot of media attention, (5) the fact that the "rational" method of making decisions in the face of risk and uncertainty is a matter of dispute, and (6) both those who bear the costs of a regulation and those who benefit from it will have an incentive to see it either squashed or implemented. The paper incorporates these effects into a modification of Peltzman's regulatory model and uses the result to analyze the recent adoption of an ordinance to child-proof swimming pools.

Zakoian, Jean-Michel

TI   Testing for Continuous-Time Models of the Short-Term Interest Rate. AU   Broze, Laurence; Scaillet, Olivier; Zakoian, Jean-Michel.

Zarazaga, Carlos E.

PD   November 1993. TI   Hyperinflations and Moral Hazard in the Appropriation of Seigniorage. AA   Federal Reserve Bank of Philadelphia. SR   Federal Reserve Bank of Philadelphia Research Working Paper: 93-26; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG   45. PR   no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE   E31, C72. KW   Inflation Cycles. Imperfect Monitoring.
AB   The paper studies the "megainflationary" experiences of several countries during the 1980's and 1990's. Such experiences have been characterized by the cyclical succession of short-lived extreme inflation rates (100-400% a month) amidst protracted periods of much lower, although still quite high by international standards, inflation rates (5-30% a month). The paper links formally this "roller coaster" pattern of the inflation rates to particular institutional arrangements. This is accomplished with a game theoretic model in which several units compete for seigniorage under conditions of imperfect monitoring. In the interpretation of the model the "megainflationary" periods play the same role as the price wars in the models of oligopolistic competition under imperfect monitoring developed in the industrial organization literature. The simulations of the model show its ability of mimic the reported "roller coaster" of inflation rates within the ranges that have been observed in some "megainflationary" economies.

Zechner, Josef

TI   Large Shareholder Activism, Risk Sharing, and Financial Market Equilibrium. AU   Adenate, Anat R.; Phleiderer, Paul; Zechner, Josef.

Zwiebel, Jeffrey

PD   December 1992. TI   A Control Theory of Dynamic Capital Structure. AA   Stanford University. SR   Stanford Graduate School of Business Research Paper: 1235; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. PG   34. PR   no charge. JE   G32, G35, D92, G34. KW   Capital Structure. Corporate Control. Dividend Policy. Debt Term Structure.
AB   This paper develops a model in which debt serves to constrain inefficient investments of empire building managers due to the consequent control implications of bankruptcy. Unlike related free cash flow models, capital structure is voluntarily chosen by the management, as a credible constraint which ensures sufficient efficiency to prevent takeover challenges. In particular, dynamic capital structure is derived as the optimal response of partially entrenched empire-building managers to control considerations; managers trade off empire building ambitions with the need to retain the empire to realize these ambitions. Such capital structure is dynamically consistent; in the model, managers are free to read just leverage each period. In deriving a dynamic managerial optimal capital structure, a policy of dividend payments coordinated with capital structure decisions follows naturally. Thus unlike free cash flow models, this model can explain why debt-constrained empire-building managers voluntarily choose to pay dividends and do not reverse restrictive debt imposed upon them by others. The model yields implications for debt level, frequency and term structure as a function of outside investment opportunities and the degree of managerial encroachment.

TI   Organizational Design and Technology Choice with Nonbinding Contracts. AU   Stole, Lars A.; Zwiebel, Jeffrey.