

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)

Aghezzaf, El Houssaine

PD August 1990. **TI** Integral Polyhedra with a Cardinality Constraint. **AU** Aghezzaf, El Houssaine; Wolsey, Laurence A. **AA** not available. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9051; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 10. **PR** not available. **JE** C61, C62. **KW** Linear Programming. Polyhedron. Convex Hulls. Linear Constraints.

AB Given a family of mixed 0-1 polyhedra, we suppose that the convex hull of solutions is known. Now we add a cardinality constraint such that the sum of the 0-1 variables is exactly k . When is the resulting polyhedron integral, or when does the resulting linear program have an integral optimal solution for all values of k ? Various equivalent conditions are given, and it is shown that uncapacitated lot-sizing polyhedra have this property when the production costs are nondecreasing over time.

Aghion, Philippe

PD May 1990. **TI** Dynamic Duopoly with Learning through Market Experimentation. **AU** Aghion, Philippe; Espinoza, Maria Paz; Jullien, Bruno. **AA** Aghion: DELTA and HEC. Espinoza: University of Bilbao. Bruno: CEPREMAP. **SR** CEPREMAP Discussion Paper: 9012; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 47. **PR** 20 F. **JE** L13, D43, D83. **KW** Learning. Oligopoly. Imperfect Information. Prices.

AB This paper analyzes how learning behaviors can substantially modify the outcome of competition in an oligopolistic industry facing demand uncertainty. We consider the case of a symmetric duopoly game where firms have imperfect information about market demand and learn through observing the volume of their sales. The main body of the paper consists in showing how market experimentation can explain the existence of price dispersion in an oligopolistic industry. We study this phenomenon and its dynamic evolution in the context of a Hotelling duopoly model; we then extend the analysis to general demand functions, to N -firm oligopolies, to asymmetric duopolies. We evaluate the social cost of price experimentation by oligopolistic firms and we emphasize several implications of the public good aspect of information about market demand.

Aizcorbe, Ana M.

PD March 1990. **TI** Procyclical Labor Productivity, Increasing Returns to Labor, and Labor Hoarding in U.S. Auto Assembly Plant Employment. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 203; Bureau of Labor Statistics, 441 "G" Street N.W. Room 2126,

Washington, D.C. 20212. **PG** 43. **PR** no charge. **JE** L62, J24, J41. **KW** Labor Productivity. Labor Hoarding. Manufacturing.

AB This paper empirically examines the sources of procyclical behavior of labor productivity for a panel of U.S. auto assembly plants from 1978-85. An employment demand equation, derived from a cost minimization model, is estimated to test for the presence of increasing returns and labor hoarding on the employment dimension. The data used match employment and wage data from the Current Establishment Survey to publically available data on output and the nature of production at these plants. Statistical evidence for increasing returns is found, while a test for labor hoarding fails to detect any evidence that U.S. auto assembly plants hoard employees. These findings suggest that the observed procyclicality of labor productivity in this industry may be more due to the nature of technology (increasing returns) than to attempts by plant managers to maintain a reserve of experienced workers (labor hoarding).

PD January 1991. **TI** A Note on Empirical Tests of Separability and the "Approximation" View of Functional Forms. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 208; Bureau of Labor Statistics, 441 "G" Street N.W., Room 2126, Washington, D.C. 20212. **PG** 18. **PR** no charge. **JE** C52, C12. **KW** Separability Tests. Functional Forms.

AB This note points out problems in the interpretation given to empirical tests of separability using conventional methods. These problems stem from the fact that the use of popular "flexible functional forms" implicitly places restrictions on the functional form of the aggregate to be tested. The implication for empirical tests of separability is that one cannot view the empirical test as a test for the existence of an aggregate. It is actually only a test for the validity of the aggregates allowed by the functional form chosen to represent the underlying function. As such, care must be taken to assure that the functional form assumptions made are consistent with the particular aggregate to be tested.

Aizenman, Joshua

PD January 1991. **TI** Trade Reforms, Credibility, and Development. **AA** Dartmouth College. **SR** National Bureau of Economic Research Working Paper: 3600; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** \$2.00. **JE** E61, E62, E22. **KW** Trade Policy. Business Investment. Public Investment.

AB This paper analyzes the role of investment policies in regimes undergoing trade liberalization with policy-makers of uncertain credibility. We consider an economy producing

exportable and importable goods. The public views the reform credibility as questionable, and expects the possibility of future policy reversal. The policy-maker sets policies and public investment as to maximize the expected utility of a risk averse representative agent. We identify the need to tax private investment in the importable sector, and to subsidize private investment in the outward-oriented sector.

PD March 1991. **TI** Externalities, Incentives and Failure to Achieve National Objectives in Decentralized Economies. **AU** Aizenman, Joshua; Isard, Peter. **AA** Aizenman: Dartmouth College. Isard: International Monetary Fund. **SR** National Bureau of Economic Research Working Paper: 3650; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** \$2.00. **JE** F41, O21, P11, D62. **KW** Externalities. Open Economy. National Planning. Government Policy.

AB The purpose of this paper is to study why decentralized economies often fail to achieve national objectives in the presence of externalities. The paper employs a two-period, open economy framework in which the central government allocates its tax revenues among a larger number of individual decision-makers (e.g., provincial authorities or managers of state enterprises). The central government has only limited monitoring capacity, which gives individual decision-makers the opportunity to commit to spend more than the incomes they are officially allocated. Our analysis suggests that adverse macroeconomic shocks reduce the likelihood that decentralized decision-makers will behave in a manner that limits spending and inflation to national objectives.

Alesina, Alberto

PD February 1991. **TI** A Model of the Political Economy of the United States. **AU** Alesina, Alberto; Londregan, John; Rosenthal, Howard. **AA** Alesina: Harvard University and National Bureau of Economic Research. Londregan and Rosenthal: Carnegie Mellon University. **SR** National Bureau of Economic Research Working Paper: 3611; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 47. **PR** \$2.00. **JE** D72, P16. **KW** Economic Growth. Elections. Political Economy. Voting.

AB We develop and test a model of joint determination of the rate of economic growth and the results of presidential and Congressional elections in the United States. In our model, economic agents and voters have rational expectations. Economic policy varies as a function of control of the White House and the two-party shares in Congress. Politics affects growth through unanticipated policy shifts following the outcome of presidential elections. The economy influences elections as voters use past realizations of growth to make rational inferences about the "competency" level of the incumbent administration. Elections are also influenced by voters using their midterm Congressional votes to moderate the policies of the incumbent administration. The theoretical model is used to generate a recursive system of equations in which the dependent variables are the growth rate and the vote shares in presidential and Congressional elections.

PD March 1991. **TI** Why are there so Many Divided Senate Delegations? **AU** Alesina, Alberto; Fiorina, Morris; Rosenthal, Howard. **AA** Alesina: Harvard University, National Bureau of Economic Research and CEPR. Fiorina: Harvard University. Rosenthal: Carnegie Mellon University.

SR National Bureau of Economic Research Working Paper: 3663; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 48. **PR** \$2.00. **JE** D72. **KW** Legislature. Election. Senate. Voting.

AB The last three decades have witnessed a sharp increase in the number of states with split Senate delegations, featuring two senators of different parties. In addition, there is evidence that senators of different parties do not cluster in the middle: they are genuinely polarized. We propose a model which explains this phenomenon. Our argument builds upon the fact that when a Senate election is held, there is already a sitting senator. If the voters care about the policy position of their state delegation in each election, they may favor the candidate of the party which is not holding the other seat. We show that, in general: (1) a candidate benefits if the non-running senator is of the opposing party; (2) the more extreme the position of the non-running senator, the more extreme may be the position of the opposing party candidate.

PD March 1991. **TI** Distributive Politics and Economic Growth. **AU** Alesina, Alberto; Rodrik, Dani. **AA** Harvard University, National Bureau of Economic Research and CEPR. **SR** National Bureau of Economic Research Working Paper: 3668; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 41. **PR** \$2.00. **JE** O47, D31, P51. **KW** Politics. Economic Growth. Democracy.

AB This paper studies the relationship between political conflict and economic growth in a simple model of endogenous growth with distributive conflicts. We study both the case of two "classes" (workers and capitalists) and the case of a continuum distribution of agents, characterized by different capital/labor shares. We establish several results concerning the relationship between the political influence of the two groups and the level of taxation, public investment, redistribution of income and growth. For example, it is shown that policies which maximize growth are optimal only for a government that cares only about the "capitalists." Also, we show that in a democracy (where the "median voter theorem" applies) the rate of taxation is higher and the rate of growth lower, the more unequal is the distribution of wealth. We present empirical results consistent with these implications of the model.

Aliprantis, Charalambos D.

PD September 1989. **TI** When is the Core Equivalence Theorem Valid? **AU** Aliprantis, Charalambos D.; Burkinshaw, Owen. **AA** Aliprantis: California Institute of Technology, Indiana University and Purdue University. Burkinshaw: Indiana University and Purdue University. **SR** Caltech Social Science Working Paper: 707; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 15. **PR** no charge. **JE** D51, D58, D61. **KW** Core. Walrasian Equilibrium. Optimal Allocation. Welfare Theorem. Exchange Economy.

AB In 1983 L. E. Jones exhibited a surprising example of a weakly Pareto optimal allocation in a two consumer pure exchange economy that failed to be supported by prices. In this example the price space is not a vector lattice (Riesz space). Inspired by Jones' example, A. Mas-Colell and S. F. Richard proved that this pathological phenomenon cannot happen when the price space is a vector lattice. In addition, C. D. Aliprantis, D. J. Brown and O. Burkinshaw have shown that when the price space of an exchange economy is a certain vector lattice,

the Debreu-Scarff core equivalence theorem holds true, i.e., the sets of Walrasian equilibria and Edgeworth equilibria coincide.

PD September 1989. **TI** An Overlapping Generations Model Core Equivalence Theorem. **AU** Aliprantis, Charalambos D.; Burkinshaw, Owen. **AA** Aliprantis; California Institute of Technology, Indiana University, and Purdue University. **Burkinshaw:** Indiana University and Purdue University. **SR** Caltech Social Science Working Paper: 706; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 18. **PR** no charge. **JE** D51, D58. **KW** Overlapping Generations Model. Core Equivalence Theorem. Walrasian Equilibrium. Exchange Economy.

AB The classical Debreu-Scarff core equivalence theorem asserts that in an exchange economy with a finite number of agents an allocation (under certain conditions) is a Walrasian equilibrium if and only if it belongs to the core of every replica of the exchange economy. The pioneering work of P. Samuelson has shown that such a result fails to be true in exchange economies with a countable number of agents. This paper presents a Debreu-Scarff type core equivalence theorem for the overlapping generations (OLG) model. Specifically, the notion of a short-term core allocation for the overlapping generations model is introduced and it is shown that (under some appropriate conditions) an OLG model allocation is a Walrasian equilibrium if and only if it belongs to the short-term core of every replica of the OLG economy.

Allen, Beth

PD May 1990. **TI** Price Equilibria in Pure Strategies for Homogeneous Oligopoly. **AU** Allen, Beth; Thisse, Jacques-Francois. **AA** Allen: University of Pennsylvania. Thisse: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9034; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 31. **PR** not available. **JE** D43, D11, D21. **KW** Oligopoly. Prices. Nash Equilibrium.

AB For a homogeneous product oligopoly market, possibilities for pure strategy Nash equilibria in prices are studied. Consumers, who each nonstrategically purchase one unit up to a common reservation price, are hypothesized to be more likely to notice large price differences (and therefore buy from the cheapest firm) than slightly different prices. For the duopoly case, existence, uniqueness, characterization and comparative statics are provided. Examples are given with 2 and n firms. A general symmetric n -firm model is proposed and a sufficient condition for existence of equilibrium in pure strategies is demonstrated.

PD September 1990. **TI** A Simple Model of Partial Information Exchange Among Individuals with Different Subjective Probabilities. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 91-02; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 15. **PR** no charge. **JE** D83, D81. **KW** Information Services. Consumption.

AB We examine markets for finitely many different types of indivisible information. The theoretical microeconomic model is consistent in that equilibrium exists. Moreover, if traders'

subjective probability beliefs are dispersed, then almost all traders demand only the unique combination of information structures that they receive in equilibrium; consumption bundles from individuals' demand correspondences need not be assigned as is usually the case whenever strict convexity fails.

PD October 1990. **TI** Price Equilibria in Pure Strategies for Homogeneous Oligopoly. **AU** Allen, Beth; Thisse, Jacques-Francois. **AA** Allen: University of Pennsylvania. Thisse: Universite Catholique de Louvain. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 91-04; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 27. **PR** no charge. **JE** D43, L13. **KW** Oligopoly. Nash Equilibrium. Prices.

AB For a homogeneous product oligopoly market, possibilities for pure strategy Nash equilibria in prices are studied. Consumers, who each nonstrategically purchase one unit up to a common reservation price, are hypothesized to be more likely to be concerned with large price differences (and therefore buy from the cheapest firm) than slightly different prices. For the duopoly case, existence, uniqueness, and characterization results are provided. Linear examples are given with 2 and n firms.

Allen, Franklin

PD February 1991. **TI** Rational Expectations and Stock Market Bubbles. **AU** Allen, Franklin; Postlewaite, Andrew. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 91-06; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 26. **PR** no charge. **JE** G12, G14. **KW** Asset Pricing. Stock Market. Rationality. Dividends. Efficient Markets.

AB What determines stock prices? Are they determined by expectations about future dividends so they trade at their "fundamental value", or are they "bubbles" which are determined by crowd psychology, fads or some other arbitrary factor? These questions are central to the issue of whether stock markets allocate resources efficiently or not.

Allen, Steven G.

PD April 1991. **TI** Pensions, Bonding, and Lifetime Jobs. **AU** Allen, Steven G.; Clark, Robert L.; McDermed, Ann A. **AA** North Carolina State University. **SR** National Bureau of Economic Research Working Paper: 3688; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 49. **PR** \$2.00. **JE** J32, J33, J63. **KW** Pensions. Retirement. Employment. Turnover. Compensation.

AB A well-known, if underappreciated, finding in the mobility literature is that turnover is much lower in jobs covered by pensions than in other jobs. This could result from capital losses for job changes created by most benefit formulas, the tendency of turnover-prone individuals to avoid jobs covered by pensions, or higher overall compensation levels in such jobs. A switching bivariate probit model of pension coverage and turnover is developed to estimate the effect of each of these factors. The results show that capital losses are the main factor responsible for lower turnover in jobs covered

by pensions, but self-selection and compensation levels also play an important role. This is the first direct evidence that bonding is important for understanding long-term employment relationships.

Alogoskoufis, George S.

PD June 1990. **TI** External Constraints on European Unemployment. **AU** Alogoskoufis, George S.; Martin, Chris. **AA** Alogoskoufis: Birkbeck College. Martin: Queen Mary and Westfield College. **SR** Birkbeck College Discussion Paper in Economics: 17/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 43. **PR** no charge. **JE** E24, E63, F41, E12. **KW** Unemployment. Macroeconomic Policy. Exchange Rate. Commodity Prices. Open Economy.

AB The persistently high rate of unemployment has probably been Western Europe's most important economic problem of the 1970s and the 1980s. Average unemployment rose relentlessly between the early seventies and the mid-eighties, in contrast to the United States, where unemployment has displayed a normal cycle, around a slightly higher mean. This has led to a number of supply side explanations centered around the structure of Europe's labor markets. In this paper we re-examine the aggregate demand explanation of Europe's unemployment experience, using a succession of models of interdependent open economies. We find that a small North-South macro model, that allows for price sluggishness in manufacturing and flexible commodity prices, can explain the most important stylized facts about OECD unemployment and Europe's relative performance, as well as the behavior of relative commodity prices.

PD October 1990. **TI** Pricing and Product Market Structure in Open Economies. **AU** Alogoskoufis, George S.; Martin, Chris; Pittis, Nikitas. **AA** Alogoskoufis and Pittis: Birkbeck College. Martin: Queen Mary and Westfield College. **SR** Birkbeck College Discussion Paper in Economics: 25/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 30. **PR** no charge. **JE** O57, F11, O19. **KW** Prices. Trade Model. International Trade. Market Structure.

AB This paper investigates whether product market structure in the industrial economies conforms to the assumptions of the two main benchmark models of international macroeconomics, namely the one sector imperfect substitutes model, and the two sector model with non-traded goods. The test proposed rests on the estimation of price equations and also allows the estimation of the degree of price sluggishness. Our findings, for twenty OECD economies, suggest that the one sector model is rejected in favor of a generalized model with two types of internationally traded goods. They also suggest significant sluggishness in the adjustment of prices.

PD November 1990. **TI** Endogenous Growth and Overlapping Generations. **AU** Alogoskoufis, George S.; van der Ploeg, Frederick. **AA** Alogoskoufis: Birkbeck College. van der Ploeg: Tilburg University. **SR** Birkbeck College Discussion Paper in Economics: 26/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 21. **PR** no charge. **JE** E62, E66, D91, O41. **KW** Learning. Endogenous Growth. Ricardian Equivalence. Overlapping Generations. Public Debt.

AB The Ramsey-Romer model of endogenous growth is extended to allow for non-interconnected overlapping

generations of households. Ricardian debt neutrality no longer holds, because a positive birth rate allows the burden of future taxes to be shared by future, yet unborn generations. As a result, increases in government consumption and government debt lead to a reduction in the growth rate of the economy. Since an increase in the share of social infrastructure raises the marginal productivity of capital, it may raise growth. An increase in population growth leads to a less than 100% increase in the growth rate of the economy, which is a sharp contrast with classical growth theory. Adjustment costs for investment damage growth prospects. They also ensure that the market rate of interest becomes endogenous and increases with government debt and government consumption. Distortionary taxation destroys debt neutrality, even if the birth rate is zero, and gives rise to an optimal share of social infrastructure.

PD December 1990. **TI** Pricing and Product Market Structures in Open Economies: An Empirical Test. **AU** Alogoskoufis, George S.; Martin, Chris; Pittis, Nikitas. **AA** Alogoskoufis and Pittis: Birkbeck College. Martin: Queen Mary College. **SR** Centre for Economic Policy Research Discussion Paper: 486; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F41, F12. **KW** Open Economies. International Trade. Market Structure. Prices. Trade Model.

AB This paper investigates whether the structure of product markets in the industrial economies conforms to the assumptions of the two main benchmark models of international macroeconomics, namely the one-sector imperfect-substitutes model, and the two-sector model with non-traded goods. Our proposed test rests on the estimation of price equations and also allows the estimation of the degree of price sluggishness. Our findings, for 20 OECD economies, suggest that the one sector model is rejected in favor of a generalized model with two types of internationally traded goods. They also suggest significant sluggishness in the adjustment of prices.

PD January 1991. **TI** Monetary Accommodation, Exchange Rate Regimes and Inflation Persistence. **AA** Birkbeck College. **SR** Centre for Economic Policy Research Discussion Paper: 503; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 35. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, E42, E31. **KW** Inflation. Exchange Rate. Monetary Regimes. Gold Standard.

AB This paper investigates the relation between the dynamics of inflation and international monetary and exchange rate regimes in the industrial economies. It demonstrates that fixed exchange rate regimes like the international gold standard and the Bretton Woods gold dollar standard appear to be associated with negligible persistence of inflation, while regimes of managed exchange rates are associated with persistent deflation, while regimes of managed exchange rates are associated with very high persistence of inflation. The interwar period is associated with persistent deflation, and the more recent period of managed floating is associated with persistent inflation. The paper uses an overlapping contracts model to propose that the higher persistence of inflation is the result of a higher monetary and exchange rate accommodation of price changes in flexible exchange rate regimes.

PD January 1991. **TI** On Public Debt Stabilizations in an Interdependent World. **AA** Birkbeck College. **SR** Centre for Economic Policy Research Discussion Paper: 490; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** E62, E63, H31, H63. **KW** Public Debt. Consumption. Public Finance.

AB This paper considers alternative modes of stabilization of worldwide relative levels of public debt. The analysis is in terms of a model of overlapping, infinitely lived households. Three methods are compared: tax finance, public-consumption finance and monetary finance. We show that a tax-financed worldwide public debt stabilization results in the highest reduction in consumption and the capital stock; monetary finance has no real effects in the model examined, other than on the composition of public debt liabilities between money and bonds. A tax-financed relative public debt stabilization by one country is shown to be associated with a greater rise in external debt and fall in relative consumption than either of the other methods. Monetary finance is again shown to have no real effects.

PD March 1991. **TI** Money and Growth Revisited. **AU** Alogoskoufis, George S.; van der Ploeg, Frederick. **AA** Alogoskoufis: Birkbeck College. van der Ploeg: Tilburg University. **SR** Centre for Economic Policy Research Discussion Paper: 532; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** O41, E13. **KW** Public Debt. Endogenous Growth. Inflation. Growth Model.

AB The Ramsey-Romer model of endogenous growth is extended to allow for holdings of real money balances and government debt as well as capital and for non-interconnected generations of households. Tax-financed increases in government consumption and debt depress growth prospects and boost inflation, as long as a positive birth rate ensures that future taxes are shouldered by future, yet unborn, generations. Debt-financed increases in government consumption depress growth and boost inflation even more. Money-financed increases in government consumption depress growth less but increase inflation by more. Giving subsidies through an increase in monetary growth is non-neutral, since this increases real growth and thus inflation increases by a lesser amount than monetary growth.

PD April 1991. **TI** Debts, Deficits and Growth in Interdependent Economies. **AU** Alogoskoufis, George S.; van der Ploeg, Frederick. **AA** Alogoskoufis: Birkbeck College. van der Ploeg: Tilburg University. **SR** Centre for Economic Policy Research Discussion Paper: 533; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 33. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F43, E62, H63, H61. **KW** Fiscal Policy. Government Expenditures. Open Economy. Public Debt. Economic Growth. **AB** We investigate the effects of budgetary policies on growth rates, external debt, real interest rates and the stock market valuation of capital in a two-country, overlapping-generations model of endogenous growth. A worldwide rise in the public debt/GDP ratio, or the share of government consumption, reduces savings and growth. They also increase real interest rates and depress the stock market because of the

adjustment costs of investment. A relative rise in one country's debt/GDP ratio or its GDP share of government consumption results in a reduction in its ratio of external assets to GDP. Growth rates are equalized unless there are differences in investment adjustment costs or depreciation rates. Per capita output levels do not necessarily converge.

Alpern, Steve

PD 1990. **TI** Unemployment through "Learning from Experience." **AU** Alpern, Steve; Snower, Dennis J. **AA** Alpern: London School of Economics. Snower: Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 27/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 36. **PR** no charge. **JE** J42, J24, J31, J64. **KW** Labor Productivity. Market Power. Learning. Unemployment. Wages.

AB The paper shows that when workers have some market power and face substantial uncertainty concerning their productivity, it may be in their interest to formulate their wage claims with a view to the information thereby revealed. This learning behavior may in turn be responsible for unemployment. Our analysis shows how the process of information acquisition through wage claims generates a higher rate of youth unemployment and long-term unemployment and a lower dismissal probability for incumbent workers than would otherwise be the case.

PD 1990. **TI** Price-Quantity Decisions as Learning Instruments. **AU** Alpern, Steve; Snower, Dennis J. **AA** Alpern: London School of Economics. Snower: Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 23/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 22. **PR** no charge. **JE** D41, D43, D21. **KW** Firm Theory. Prices. Information. Learning.

AB The paper analyzes how firms may use their pricing and quantity decisions to gain information about the product demands they face. Our point of departure is the commonplace observation that sellers learn about product demands by observing the sales responses to their price-quantity decisions. We show how different price-quantity decisions can yield different demand information. Consequently, firms have an incentive to make these decisions with a view not merely to maximizing profits under a given information set, but also to invest in information itself. We derive a recursive method for determining the optimal prices and quantities in this context and isolate the effect of the learning motive on the price-quantity decisions.

PD November 1990. **TI** The Maximal Value of Demand Information: The High-Low Search Approach. **AU** Alpern, Steve; Snower, Dennis J. **AA** Alpern: London School of Economics. Snower: Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 28/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 30. **PR** no charge. **JE** D21, D23. **KW** Search Theory. Information.

AB The paper distinguishes between "inside" information, which the firm accumulates automatically by observing the sales responses to its supply decisions, and "outside" information, which the firm may purchase in the market for information. In this context, we derive a maximal value of outside information for a firm facing demand uncertainty

(rather than risk). This maximal value, specified in terms of the costs of over- and under-production that the firm incurs under imperfect information, is an upper bound on what the firm may find it worthwhile to spend on the purchase of information. The firm's learning strategies analyzed here extend the mathematical theory of "high-low search" developed by Gal, Baston and Bostock, and Alpern.

PD December 1990. **TI** Unemployment through "Learning from Experience". **AU** Alpern, Steve; Snower, Dennis J. **AA** Alpern: London School of Economics. Snower: Birkbeck College. **SR** Centre for Economic Policy Research Discussion Paper: 483; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 36. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** J41, J64, E24. **KW** Unemployment. Learning. Wages. Labor Productivity.

AB This paper shows that when workers have some market power and face substantial uncertainty concerning their productivity, it may be in their interest to formulate their wage claims with a view to the information thereby revealed. This learning behavior may in turn be responsible for unemployment. Our analysis shows how the process of information acquisition through wage claims generates a higher rate of youth unemployment and long-term unemployment and a lower probability of dismissal for incumbent workers than would otherwise be the case.

Anderlini, Luca

PD November 1990. **TI** Communication, Computability and Common Interest Games. **AA** St. John's College, Cambridge. **SR** University of Cambridge Economic Theory Discussion Paper: 159; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 38. **PR** \$4.00 (2.00 pounds); checks payable to University of Cambridge. **JE** C71, D83. **KW** Communication. Common Interest Games. Cooperative Games.

AB This paper provides a reason for unlimited and costless pre-play communication to matter in the play of one-shot strategic (normal)-form two-player finite-action games. It is shown that if players are taken to be computing devices (Turing machines) which play a two-stage game of pre-play communication and play, the only payoffs which survive appropriately computable trembles are the Pareto efficient payoffs of the underlying common interest game.

Anstreicher, Kurt M.

PD May 1990. **TI** Strict Monotonicity and Improved Complexity in the Standard Form Projective Algorithm for Linear Programming. **AA** not available. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9035; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 22. **PR** not available. **JE** C61, C63. **KW** Linear Programming. Karmakar's Algorithm. Projective Algorithm.

AB In a recent paper, Xiao and Goldfarb show that a version of the standard form projective algorithm can achieve $O(\sqrt{N})$ step complexity, as opposed to the $O(nL)$ step complexity originally demonstrated for the algorithm. The analysis of Xiao and Goldfarb shows that the algorithm, using a constant, fixed step length, approximately follows the central trajectory. Unfortunately, their proof technique precludes

taking longer steps based on a line search of the potential function, as would generally be done in practice. In this paper we show that simple modifications of the projective algorithm obtain the same complexity improvement, while permitting a line search of the potential function on each step.

Antonelli, Cristiano

PD April 1990. **TI** The Diffusion of Interdependent Innovations in the Textile Industry. **AU** Antonelli, Cristiano; Petit, Pascal; Tahar, Gabriel. **AA** Antonelli: University of Torino. Petit: CEPREMAP. Tahar: CNRS, Toulouse. **SR** CEPREMAP Discussion Paper: 9030; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 28. **PR** 20 F. **JE** L67, O31, O14. **KW** Technological Change. Textile Industry. Industrialization.

AB The present paper focuses on the interdependence among technical changes in different stages of production in the textile industry. A model tries to present the different linkages induced by price and quality effects of technical change and technological complementarities. The empirical analysis is based on data on the diffusion of three major innovations. One is the product innovation of synthetic fibers, the other two are process innovations in spinning (open-end rotors) and in weaving (shuttle-less looms), respectively. A model is estimated pooling information of 16 countries over 8 years, where the propensities to modernize are dependent variables.

Araque G., Jesus Rafael

PD December 1990. **TI** Lots of Combs of Different Sizes for Vehicle Routing. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9074; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 40. **PR** not available. **JE** R41, C60. **KW** Transportation. Routing Problem.

AB We introduce many facet-inducing comb inequalities for the Path Partitioning problem which is a reformulation of the one-depot capacity constrained Vehicle Routing problem with identical customers. We introduce the concept of a small tooth and of a large tooth, and give sufficient conditions under which combs with an odd number of small teeth, or an arbitrary number of large teeth, or an odd number of small teeth and one large tooth, or an odd number of small teeth and an arbitrary number of large teeth yield facet-inducing inequalities for the Path Partitioning polytope.

PD October 1990. **TI** Capacitated Trees, Capacitated Routing, and Associated Polyhedra. **AU** Araque, G. Jesus Rafael; Hall, Leslie A.; Magnanti, Thomas L. **AA** Araque: Universite Catholique de Louvain. Hall: Princeton University. Magnanti: Massachusetts Institute of Technology. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9061; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 77. **PR** not available. **JE** R41, C60. **KW** Transportation. Routing Problem.

AB We study the polyhedral structure of two related core combinatorial problems: the subtree cardinality-constrained minimal spanning tree problem and the identical customer vehicle routing problem. For each of these problems, and for a forest relaxation of the minimal spanning tree problem, we introduce a number of new valid inequalities and specify

conditions for ensuring when these inequalities are facets for the associated integer polyhedra. The inequalities are defined by one of several underlying support graphs: (i) a multistar, a "star" with a clique replacing the central vertex; (ii) a clique cluster, a collection of cliques intersecting at a single vertex, or more generally at a "central" clique; and (iii) a ladybug, consisting of a multistar as a head and a clique as a body.

Arnott, Richard

PD January 1991. **TI** Equilibrium in Competitive Insurance Markets with Moral Hazard. **AU** Arnott, Richard; Stiglitz, Joseph E. **AA** Arnott: Boston College. Stiglitz: Stanford University. **SR** National Bureau of Economic Research Working Paper: 3588; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** \$2.00. **JE** D21, D41, D82, D61, G22. **KW** Competitive Equilibrium. Moral Hazard. Insurance.

AB This paper examines the existence and nature of competitive equilibrium with moral hazard. The more insurance an individual has, the less care will he take. Consequently, insurance firms attempt to restrict their clients' aggregate insurance purchases. If individuals' aggregate insurance purchases are observable, each firm will ration the amount of insurance its clients can purchase and insist that they purchase no insurance from other firms. This paper focuses on the alternative situation where firms cannot observe their clients' aggregate insurance purchases. We show that firms will still attempt to restrict their clients' aggregate purchases, but now they must do so indirectly.

Artis, M. J.

PD April 1991. **TI** The Measurement of Policy Effects in a Non-Causal Model: An Application to Economic Policy in the U.K., 1974-79. **AU** Artis, M. J.; Bladen-Hovell, R.; Ma, Y. **AA** Artis and Bladen-Hovell: Manchester University. Ma: University of Strathclyde. **SR** Centre for Economic Policy Research Discussion Paper: 526; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** D84, E13, E17. **KW** Economic Policy. Expectations. Macroeconomic Model. Simulation Model.

AB There is a well-established methodology for measuring the effects of economic policy in a model that is "causal" or backward-looking. In this paper a complementary methodology is described for the case in which the model is "non-causal" or forward-looking. The methodology is then applied to an econometric model of the British economy, the National Institute model version 11; in this version expectational variables appear in several key equations (both for quantities and for prices) and the model may be solved in forward-looking or in backward-looking mode. The policy period for which the exercise is conducted is 1974-9, the term of office of the last Labour administrations (under the premierships of Wilson and Callaghan), and a period of considerable economic stress. The results obtained for the effects of policy when the model is solved in forward-looking mode are compared with those obtained when expectations are assumed to be formed adaptively.

Auerbach, Alan J.

PD January 1991. **TI** Generational Accounts - A Meaningful Alternative to Deficit Accounting.

AU Auerbach, Alan J.; Gokhale, Jagadeesh; Kotlikoff, Laurence J. **AA** Auerbach: University of Pennsylvania. Gokhale: Federal Reserve Bank of Cleveland. Kotlikoff: Boston University. **SR** National Bureau of Economic Research Working Paper: 3589; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 45. **PR** \$2.00. **JE** H63, H31. **KW** Fiscal Policy. Public Debt. Accounting.

AB This paper presents a set of generational accounts (GAs) that can be used to assess the fiscal burden current generations are placing on future generations. The GAs indicate the net present value amount that current and future generations are projected to pay to the government now and in the future. The generational accounting system represents an alternative to using the federal budget deficit to gauge intergenerational policy. From a theoretical perspective, the measured deficit need bear no relationship to the underlying intergenerational stance of fiscal policy. Within the range of reasonable growth and interest rate assumptions the difference between age zero and future generations in GAs ranges from 17 to 24 percent.

PD February 1991. **TI** Recent U.S. Behavior and the Tax Reform Act of 1986: A Disaggregate View. **AU** Auerbach, Alan J.; Hassett, Kevin. **AA** Auerbach: University of Pennsylvania. Hassett: Columbia University. **SR** National Bureau of Economic Research Working Paper: 3626; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** \$2.00. **JE** H25, G31, M21. **KW** Taxes. Taxation. Business Investment.

AB The Tax Reform Act of 1986 was expected to cause an overall decline in business fixed investment and a shift in the composition of investment away from machinery and equipment, which previously had received an investment tax credit. Yet neither investment relative to GNP nor equipment investment relative to total investment declined during the period 1987-89. This paper's analysis of investment at the level of individual industries and assets helps reconcile the recent pattern of investment and the predicted effects of the Tax Reform Act. We find that the trend toward investment in equipment predated the Act, and that recent investment in equipment has fallen short of what would have been expected on the basis of nontax factors alone. Using a new technique to identify the impact of taxation on investment, we confirm the importance of tax policy using the cross-section pattern of equipment investment since 1986.

PD February 1991. **TI** Tax Policy and Business Fixed Investment in the United States. **AU** Auerbach, Alan J.; Hassett, Kevin. **AA** Auerbach: University of Pennsylvania. Hassett: Columbia University. **SR** National Bureau of Economic Research Working Paper: 3619; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** \$2.00. **JE** H25, H21, G31. **KW** Investment. Taxes. Business Taxes. Tax Policy.

AB This paper derives and estimates models of nonresidential investment behavior in which current and future tax conditions directly affect the incentive to invest. The estimates suggest that taxes have played an independent role in affecting postwar U.S. investment behavior, particularly for investment in machinery and equipment. In addition, the paper develops a method for assessing the impact of tax policy on the volatility of investment when such policy is endogenous. Illustrative calculation using this technique, based on the paper's empirical estimates, suggest that tax policy has not served to stabilize investment in equipment or nonresidential

structures during the sample period.

Bai, Jun

PD March 1990. **TI** Discrimination between Nested Two-and-Three-Parameter Distributions: An Application to Models of Air Pollution. **AU** Bai, Jun; Jakeman, Anthony J.; McAleer, Michael. **AA** Bai and Jakeman: Australian National University. McAleer: Australian National University and Tilburg University. **SR** Australian National University Working Paper in Economics and Econometrics: 197; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 23. **PR** no charge. **JE** C12, C15, C22. **KW** Hypothesis Testing. Monte Carlo Model. Simulation. Pollution.

AB The purpose of this paper is to discriminate between 2- and 3-parameter nested alternatives for the gamma, Weibull and lognormal distributions. Monte Carlo experiments are conducted to evaluate the likelihood ratio test, Akaike's information criterion, Schwarz's information criterion, the Chi-square test and the Kolmogorov-Smirnov test. The performance of the tests and criteria depends on the types of nested distributions under consideration, the parametric values of the parent distributions, the confidence levels used (if applicable), and the sample sizes. The practical usefulness of the techniques is illustrated by observing the errors of the models in fitting the upper percentiles of the parent distribution. Two sets of air pollution data, namely hourly pollutant observations of beta-scattering and nitrogen dioxide, from an urban air shed are used to examine the similarities and differences in fitting 2- and 3-parameter distributions where historical practice suggests there is a preference for the more parsimonious.

Baldwin, John R.

PD February 1991. **TI** Distinguishing Characteristics of Foreign High Technology Acquisitions in Canada's Manufacturing Sector. **AU** Baldwin, John R.; Gorecki, Paul K. **AA** Baldwin: Queen's University and Labour Market Analysis Group, Statistics Canada. Gorecki: Business and Labour Market Analysis Group, Statistics Canada and Economic Council of Canada. **SR** Queen's Institute for Economic Research Discussion Paper: 804; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 44. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** L60, G34, O51, L11. **KW** Manufacturing, Canada. Mergers.

AB Considerable interest in the effect of mergers in high technology industries exists because this sector is seen to be strategically important for industrial policy. This paper investigates the effect of mergers in this sector, comparing them to mergers in other industries. The effect of nationality is also examined. The paper outlines the magnitude of divestitures and acquisitions. It asks how important this is relative to turnover arising from a plant opening and closing. It then analyzes the impact of mergers on labor productivity, wages, and salaries.

Ball, Laurence

PD February 1991. **TI** The Genesis of Inflation and the Costs of Disinflation. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3621; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** \$2.00. **JE** E31, E32. **KW** Inflation. Expectations.

AB This essay asks how high inflation arises and why it is costly to eliminate. Specifically, the paper discusses the roles of price rigidity and credibility problems in explaining the costs of disinflation; the puzzle of persistent inflation triggered by one time macroeconomic shocks; and the case for returning to adaptive expectations in theories of inflation.

Ball, Michael

PD 1990. **TI** Taxation and the Owner Occupied Housing Market. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 15/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 40. **PR** no charge. **JE** H24, H21, R21, R31. **KW** Taxes. Housing Market. Government Policy.

AB This paper argues for a reform of taxation policy towards owner occupation. The reforms are justified on the basis of their impact on the behavior of the owner occupied housing market and their distributional and efficiency benefits. The current tax situation is outlined, including its effects on the housing market, and a survey is made of the range of reforms currently being suggested. A general national tax on the current value of owner occupied houses is proposed. The effect of this tax on specific types of household - first-time buyers, the low income and elderly, for example - could be lessened through replacing mortgage interest tax relief with targeted reliefs that taper off over a period of years. In addition, a variable rate sales tax is suggested, with a low rate during market downturns and a progressively higher rate during house price booms, in order to dampen the current volatility of the housing market. The impact of the reforms on mortgage finance, house building and development land is considered. Finally it is argued that property taxation should not form the basis for tax setting by local authorities.

Ballivian, Maria Amparo

PD February 1991. **TI** Product Diversification, Economies of Scope and Risk Avoidance: An Application to Indian Agriculture. **AU** Ballivian, Maria Amparo; Sickles, Robin C. **AA** Ballivian: Bolivian Mission. Sickles: Rice University. **SR** New York University Economic Research Reports: 91-11; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 27. **PR** no charge. **JE** Q16, Q11, Q12, D24. **KW** Flexible Functional Forms. Risk. Agriculture.

AB In this paper we formally analyze the relationship between risk avoidance behavior and economic jointness in a multi-output agricultural technology. We build on the work of Kohli (1983) who considered uncertainty in production in terms of Debreu (1954) contingency outputs by focusing on farmer specific heterogeneity in attitudes towards risk-taking, while treating production uncertainty as unobserved stochastic error that is common to all region specific farms. We furthermore utilize a new flexible functional form, the constant Elasticity of Transformation, Constant Elasticity of Substitution, Generalized Leontief, which has the appealing property of relative flexibility while ensuring proper curvature properties of the estimated multi-output technology over a larger sample region of the price/quantity space than a flexible form such as the Generalized Leontief (Diewert, 1971).

Barham, Vicky

PD November 1990. **TI** Bank Loans Securitization with

Asymmetric Information: A Principal-Agent Solution. AU Barham, Vicky; Lefebvre, Olivier. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9072; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. PG 40. PR not available. JE G21, H25. KW Banking. Securities. Taxes. Bank Loans.

AB This paper presents the conditions under which banks will securitize loans through asset backed securities to avoid "intermediation taxes". As banks have private information with respect to the quality of these loans, a standard Akerlof problem arises. We study the optimality of using credit insurance contracts with ex post inspection as a mechanism for securitizing loan portfolios. This mechanism is compared with the use of a rating agency, and it is proved that a bank will never securitize the entirety of its portfolio using a rating agency. It is also proven that the bank will always securitize all of its bad loans, and thus the view that banks which securitize loan portfolios will be left with only poor quality loans on their balance sheet does not find support.

Barker, Terry

PD August 1990. TI Measuring the Peace Dividend in the United Kingdom. AU Barker, Terry; Dunne, Paul; Smith, Ron. AA Barker: University of Cambridge. Dunne: Magdalene College, Cambridge. Smith: Birkbeck College. SR University of Cambridge DAE Working Paper: 9019; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 22. PR \$4.00 (2.00 pounds) checks payable to University of Cambridge. JE D74, H56, E27, E62. KW Public Finance. Military Spending. Forecasting. Unemployment. Macroeconomic Model.

AB The changing strategic climate in Europe has led to considerable speculation about major cuts in military spending. This paper examines the economic implications of such reductions in military spending for the U.K. The international economic and strategic context is discussed and then a multisectoral macroeconomic model is used to evaluate the impact of cutting U.K. defense spending. The simulation results show that a reduction in military expenditure to one half of its 1992 level by the year 2000, with the released "peace dividend" allocated to other government current and capital expenditures, would lead to a reduction in unemployment of 0.52 million and an increase in output above base by 1.84% between 1992 and the year 2000.

Bartelsman, Eric J.

PD March 1991. TI Sourcing Externalities. AU Bartelsman, Eric J.; Caballero, Ricardo J.; Lyons, Richard K. AA Bartelsman: Board of Governors of the Federal Reserve System. Caballero: Columbia University. Lyons: Columbia University and National Bureau of Economic Research. SR Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 153; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. PG 26. PR no charge. JE D24, D62, L21, L60. KW Externalities. Productivity. Manufacturing. External Economies.

AB In this paper we build upon previous work on external economies in manufacturing by providing new evidence helpful for discriminating between different types of externalities. We investigate four-digit level input-output relationships and find

that, over shorter horizons, the linkage between an industry and its customers is the most important factor in the transmission of externalities. Thus, as intuition would suggest, transactions externalities that accrue primarily to the seller and activity-driven demand externalities are significant for explaining the short-run behavior of measured total factor productivity. Over longer horizons, on the other hand, it is the activity level of suppliers that is more important, suggesting that external effects are also operating through intermediate goods linkages.

Bartlett, W.

PD February 1991. TI Labor Managed vs. Private Firms: An Empirical Comparison of Cooperatives and Private Firms in Central Italy. AU Bartlett, W.; Cable, J.; Estrin, S.; Jones, D.; Smith, S. AA London School of Economics. SR London School of Economics Centre for Economic Performance Discussion Paper: 17; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 34. PR no charge. JE J54, L22. KW Cooperatives. Italy. Industrial Organization.

AB The paper analyzes the differences between the behavior of private firms and producer cooperatives in a matched sample of the two organizational types from Northern Italy, the region with the largest concentration of cooperatives in the world. It therefore offers for the first time reliable and detailed comparative information on key issues such as investment, productivity, wages, employment and industrial relations. Among the more interesting findings are the absence of significant differences with regard to investment horizons and criteria for finance, despite theoretical assertions to the contrary. However, it would appear that cooperatives substitute labor effort for capital, and achieve higher productivity and better industrial relations, as well as significantly narrower wage differentials.

Baudier, Edmond

PD November 1989. TI Core and Coherent Games. AA CEPREMAP. SR CEPREMAP Discussion Paper: 8926; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 19. PR 20 F. JE C70, C62. KW Convex Game. Balanced Game. Core. Game Theory.

AB This paper is concerned with the core of an n-person game. An existence condition which does not depend on player's preferences is given. This condition is called "coherence". The connections with convex games and balanced games are studied. Paper in French.

Bean, Charles R.

TI Europe's Employment Problem: A Synthesis. AU Dreze, Jacques H.; Bean, Charles R.

Bebchuk, Lucian

PD May 1991. TI Information and the Scope of Liability for Breach of Contract: The Rule of Hadley v. Baxendale. AU Bebchuk, Lucian; Shavell, Steven. AA Harvard University. SR National Bureau of Economic Research Working Paper: 3696; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 52. PR \$2.00. JE K12. KW Contract Law. Liability. Common Law.

AB According to the contract law principle established in the famous nineteenth century English case of Hadley v. Baxendale, and followed ever since in common law world,

liability for a breach of contract is limited to losses "arising ... according to the usual course of things," or that may be reasonably supposed "to have been in the contemplation of both parties, at the time they made the contract, ..." Using a formal model, we attempt in this paper to analyze systematically the effects and the efficiency of this limitation on contract damages. We study two alternative rules: the limited liability rule of Hadley, and an unlimited liability rule.

Behrman, Jere R.

PD February 1991. **TI** The CET-CES-Generalized Leontief Variable Profit Function: An Application to Indian Agriculture. **AU** Behrman, Jere R.; Lovell, C. A. Knox; Pollack, Robert A.; Sickles, Robin C. **AA** Behrman: University of Pennsylvania. Lovell: University of North Carolina. Pollack: University of Pennsylvania and University of Washington. Sickles: Rice University. **SR** New York University Economic Research Reports: 91-10; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 22. **PR** no charge. **JE** D24, Q11, Q12. **KW** Functional Forms. Profit Function. Production Function. Agriculture.

AB In this paper we propose and estimate a new flexible functional form for a multiple output variable profit function, the CET-CES-Generalized Leontief form, or CET-CES-GL for short. Our new specification provides a natural and tractable generalization of the GL variable profit function introduced by Diewert (1973) at the cost of only one additional parameter. The new specification is motivated by the observation that the GL variable profit function pivots off a linear base, which corresponds to a fixed proportions (i.e., Leontief) production technology. The CET-CES-GL variable profit function generalizes the base off which the GL variable profit function pivots. By adding one parameter, we generalize a variable profit function that pivots off a less restrictive CET-CES base.

Bell, Linda A.

PD February 1991. **TI** Lump-Sums, Profit Sharing, and Labor Costs in the Union Sector. **AU** Bell, Linda A.; Neumark, David. **AA** Bell: Harvard University. Neumark: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3630; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** \$2.00. **JE** J51, J32, J33, J41. **KW** Unions. Contracts. Profit Sharing. Compensation. Labor Costs.

AB This paper documents the increase in the use of lump-sum payments and profit sharing plans in union contracts in the 1980s, and evaluates the extent to which these innovations may have contributed to moderation in the growth of labor costs, and increased pay flexibility. We find evidence that lump-sum and profit sharing arrangements reduced labor cost growth at both the aggregate and firm level. But the evidence linking these plans to labor cost flexibility is mixed; although the evidence suggests that profit sharing plans may be associated with greater flexibility at the firm level, there is no evidence that lump-sum plans increase flexibility at either the firm or aggregate level.

Beltratti, Andrea E.

PD March 1991. **TI** Actual and Warranted Relations Between Asset Prices. **AU** Beltratti, Andrea E.; Shiller,

Robert J. **AA** Beltratti: University of Torino. Shiller: Yale University. **SR** National Bureau of Economic Research Working Paper: 3640; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$2.00. **JE** G12, G14. **KW** Forecasting. Stock Markets. Asset Pricing. Market Efficiency.

AB Efficient markets models assert that the price of each asset is equal to the optimal forecast of its fundamental value, but the models do not imply that the covariances between prices equal the corresponding covariances and correlations of prices based on the covariance of fundamental values, and show how such bounds can be tightened using information about forecasting variables. The methods are used to examine the historical covariance between the U.S. and U.K. stock markets 1919-1989. The bounds on the covariance include the actual correlation.

Benard, Jean

PD October 1990. **TI** Prices and Competition in the Inverse Transition Economy. **AA** CEPREMAP and University of Paris - I. **SR** CEPREMAP Discussion Paper: 9023; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 22. **PR** 20 F. **JE** O12, P21, P22, P51. **KW** Privatization. Socialism. Prices. Competition.

AB Among the many problems arising from the "inverse transition" process i.e. the process for the socialist economies to go back from central planning to a market system, we study here those dealing with price and competition mechanisms, and with the privatization process. In section I, we recall the main characteristics of the so-called "price truth", within various configurations, and the first and second best optima which are associated to it. We, then, analyze, in section II, the condition for an efficient price liberalization, that aims to lead to an optimum and we stress the importance of competition among the firms. The third section is devoted to the links between price liberalization and privatization and to labor market and income distribution. Finally section IV deals with the dynamics of this "inverse transition", mainly the successive steps of price liberalization and the macroeconomic conditions. Paper in French.

Benassy, Jean-Pascal

PD September 1989. **TI** Microeconomic Foundations and Properties of a Macroeconomic Model with Imperfect Competition. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 8927; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 23. **PR** 20 F. **JE** E12, E17, E63, D43. **KW** Imperfect Competition. Macroeconomic Model. Monetary Policy. Government Spending.

AB This article constructs a macroeconomic model with imperfect competition on the basis of rigorous microeconomic foundations (notably objective demand curves and rational expectations) and deducts various features: inefficiency and Keynesian properties of the equilibrium neutrality of monetary policy, and characterization of optimal government spending policies. Finally, this model is compared to the corresponding Keynesian and Walrasian macroeconomic models.

PD October 1989. **TI** Optimal Government Policy in a Macroeconomic Model with Imperfect Competition and Rational Expectations. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 8928; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 24. **PR** 20 F. **JE** E12, E13, E17. **KW** Taxes. Government Spending.

Rational Expectations. Imperfect Competition. Macroeconomic Model.

AB This paper studies some normative aspects of government spending and tax policies in a macroeconomic model with imperfect competition and rational expectations. It is shown that the traditional "first best" policies must be systematically modified to alleviate the underemployment of resources coming from imperfect competition. The underlying mechanism is however completely different from traditional Keynesian multiplier effects. The analysis is carried first in a simple "representative agent" model with perceived demand curves, then in a multiple agent model with objective demand curves, which is shown to yield the same results as the simpler model.

PD February 1990. **TI** Monopolistic Competition. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9006; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 70. **PR** 25 F. **JE** L13, D43. **KW** Monopolistic Competition. Differentiated Products. Imperfect Competition.

AB This paper, which has been prepared for the Handbook of Mathematical Economics, studies a number of results and conceptual problems in the field of monopolistic competition. After an historical introduction, it presents some first concepts in a partial equilibrium framework, discusses the issue of competitiveness of monopolistic competition, describes various representations of product differentiation, gives a number of general equilibrium formalizations and relates the field to some macroeconomic issues.

PD November 1990. **TI** Imperfect Competition and the Suboptimality of Rational Expectations. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9024; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 18. **PR** 20 F. **JE** D84, D43, D51. **KW** Imperfect Competition. Rational Expectations. Walrasian Equilibrium.

AB This paper investigates whether "nonrational" expectations can lead to outcomes which, other things being equal, Pareto dominate rational expectations outcomes. This investigation is carried out in an intertemporal model with imperfect competition where prices and quantities are set by fully rational maximizing agents. In this model the first theorem of welfare holds, so that the Walrasian equilibrium with rational expectations cannot be Pareto dominated. This conclusion is extremely fragile, however, and we show that as soon as some degree of imperfect competition is present, rational expectations are suboptimal, in the sense that they are dominated by "irrational expectations".

PD December 1990. **TI** Are Rational Expectations Really Rational? **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9032; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 10. **PR** 20 F. **JE** D84, D11, D50. **KW** Walrasian Equilibrium. Rationality. Rational Expectations. Expectations.

AB This paper investigates whether rational expectations are actually rational, i.e. whether they emerge as the outcome of an individual maximizing process. For that purpose we construct a two-stage game. In the first stage an expectations scheme is chosen for each agent through utility maximization. In the second stage agents maximize subject to the chosen expectations scheme and a Walrasian equilibrium is obtained. The traditional rational expectations literature simply assumes that rational expectations are given to all agents in the first

stage, whereas we extend the framework by making expectations also an object of choice. If rational expectations are individually rational, they should be an equilibrium in the "expectations game". Surprisingly it is found that they are not, and that "rational expectations" are usually not individually rational.

Benhabib, Jess

PD January 1991. **TI** Homework in Macroeconomics: Household Production and Aggregate Fluctuations. **AU** Benhabib, Jess; Rogerson, Richard; Wright, Randall. **AA** Benhabib; New York University. Rogerson; Stanford University. Wright: Federal Reserve Bank of Minneapolis and University of Pennsylvania. **SR** Federal Reserve Bank of Minneapolis Staff Report: 135; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 36. **PR** no charge. **JE** D13, E32, E38. **KW** Household Production. Business Cycle. Aggregate Fluctuations. Simulation Model.

AB This paper explores some macroeconomic implications of including household production in an otherwise standard real business cycle model. We calibrate the model based on microeconomic evidence and long-run considerations, simulate it, and examine its statistical properties. Our finding is that introducing home production significantly improves the quantitative performance of the standard model along several dimensions. It also implies a very different interpretation of the nature of aggregate fluctuations.

Bergin, James

PD April 1990. **TI** A Model of Strategic Behavior in Repeated Games. **AA** Universite Catholique de Louvain and Queen's University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9032; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 54. **PR** not available. **JE** C71. **KW** Repeated Game. Game Theory. Cooperative Games.

AB This paper develops a general repeated game model over arbitrary time domain. The model includes the standard repeated game and the most general forms of a differential game. The paper considers the issue of formulating strategic behavior in a general framework which include continuous time behavior. There are obvious requirements which a strategy must necessarily satisfy. These requirements are stated as axioms and within this axiomatic framework a class of strategies (called variable response strategies, VRS) is developed. In this class of strategy, a player is committed at any point in time to history independent behavior for a positive length of time. However this length of time of commitment depends on the way the history evolves locally. Thus the speed of reaction to the evolution of the history is not bounded away from zero in the VRS formulation. Nevertheless, it is shown that these strategies generate unambiguous outcomes on any subgame and so are well defined.

PD June 1990. **TI** Existence of Equilibrium in Anonymous Sequential Games with General State Space of Aggregate Uncertainty. **AU** Bergin, James; Bernhardt, Dan. **AA** Bergin; Queen's University and Universite Catholique de Louvain. Bernhardt; Queen's University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9043; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 29. **PR** not available. **JE** D81, C71, C62. **KW** Sequential Games.

Uncertainty. State Space Model.

AB In this paper we consider Anonymous Sequential Games with aggregate uncertainty and provide two equilibrium existence results for a general state space representing aggregate uncertainty.

Berndt, Ernst R.

TI Assessing the Productivity of Information Technology Equipment in U.S. Manufacturing Industries. **AU** Morrison, Catherine J.; Berndt, Ernst R.

Bernhardt, Dan

TI Existence of Equilibrium in Anonymous Sequential Games with General State Space of Aggregate Uncertainty. **AU** Bergin, James; Bernhardt, Dan.

Bernstein, Jeffrey I.

PD January 1991. **TI** Price-Cost Margins, Exports and Productivity Growth: With an Application to Canadian Industries. **AA** Carleton University. **SR** National Bureau of Economic Research Working Paper: 3584; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** \$2.00. **JE** L13, L11, L60, O47. **KW** Oligopoly. Productivity. Industrial Organization.

AB A model is estimated for oligopolistic industries producing multiple outputs in short-run equilibrium. Outputs are sold domestically and exported, while capital is treated as a quasi-fixed factor. The model is applied to the Canadian nonelectrical machinery, electrical products and chemical products industries. The results show that there is significant oligopoly power in each of the industries, and that the degree of this power differs between the domestic and export markets. Total factor productivity is decomposed. Price-cost margins exert little influence but the rate of technological change, returns to scale and the rate of capital adjustment determine productivity growth.

PD February 1991. **TI** Product Demand, Cost of Production, Spillovers, and the Social Rate of Return to R&D. **AU** Bernstein, Jeffrey I.; Nadiri, M. Ishaq. **AA** Bernstein: Carleton University. Nadiri: New York University. **SR** National Bureau of Economic Research Working Paper: 3625; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** \$2.00. **JE** O31, O32, O33. **KW** Technological Change. R&D. Production. Technology.

AB The purpose of this paper is to develop and estimate a model of production with endogenous technological change. Technological change arises from R&D capital accumulation decisions. These decisions respond to market and government incentives and generate R&D capital spillovers. A spillover network of senders and receivers is estimated. The network shows that each receiving industry is affected by a distinct set of R&D sources and each sending industry affects a unique set of receivers. For the receivers, spillovers generally expand product markets, lower product prices, increase production costs and input demands. For the sources, significant R&D spillovers cause the social rates of return to R&D capital to be substantially above the private returns.

Bertola, Giuseppe

PD January 1991. **TI** Stochastic Devaluation Risk and the

Empirical Fit of Target Zone Models. **AU** Bertola, Giuseppe; Svensson, Lars E. O. **AA** Bertola: Princeton University. Svensson: Institute for International Economic Studies, Stockholm. **SR** National Bureau of Economic Research Working Paper: 3576; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** \$2.00. **JE** F31, E42, E52. **KW** Exchange Rate. Devaluation. Monetary Regimes. Monetary Policy.

AB This paper proposes a tractable and realistic nonlinear model of exchange rate dynamics, and argues that its predictions are consistent with available empirical evidence on exchange rate and interest differential behavior in real-life target zones. In our model, the exchange rate fluctuates between given boundaries for random lengths of time and jumps discretely when devaluations occur. We allow for stochastic variability in the likelihood and size of devaluations, and we provide explicit solutions for the stochastic processes followed by the exchange rate and by the expected rate of depreciation. The model produces realistic patterns of covariation between exchange rates and interest rate differentials, and provides interesting interpretations of available empirical evidence.

PD January 1991. **TI** Sustainable Intervention Policies and Exchange Rate Dynamics. **AU** Bertola, Giuseppe; Caballero, Ricardo J. **AA** Bertola: Institute for Economic Research, Italy. Caballero: Columbia University. **SR** Centre for Economic Policy Research Discussion Paper: 504; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 19. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, E42, E52. **KW** Exchange Rate. Target Zones. Government Intervention. Monetary Policy.

AB Recently developed models of exchange rate dynamics emphasize the expectational effects of infrequent intervention. This paper proposes a stylized probabilistic framework in which such effects can be studied along with realistic concerns about the sustainability of the intervention policy. In this framework, the level of reserves determines the extent to which nonlinear intervention affects the level of exchange rates and their sensitivity to movements in fundamentals. We show that all such effects are absent when the possible reserve levels are weighted by their long-run probabilities.

PD February 1991. **TI** Stochastic Devaluation Risk and the Empirical Fit of Target Zone Models. **AU** Bertola, Giuseppe; Svensson, Lars E. O. **AA** Bertola: Institute for Economic Research, Italy. Svensson: Institute for International Economic Studies, Stockholm. **SR** Centre for Economic Policy Research Discussion Paper: 513; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, E52. **KW** Exchange Rate. Devaluation. Interest Rate. Target Zone.

AB In our model, an exchange rate fluctuates between given boundaries for random lengths of time and jumps discretely when devaluations occur. We provide explicit solutions for the stochastic processes followed by the exchange rate and by the expected rate of depreciation when the likelihood and the size of devaluations vary stochastically over time. The model produces realistic patterns of covariation between exchange rates and interest rate differentials, and provides interesting interpretations of available empirical evidence. We also specify a technique for inferring the risk of devaluation from target zone data.

Blackburn, Keith

PD 1990. **TI** Monetary Policy and Reputation. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9007; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 61. **PR** no charge. **JE** E52, D70, D84, C70. **KW** Monetary Policy. Game Theory. Rational Expectations.

AB Two decades have now past since the rational expectations hypothesis began to establish a new methodology in macroeconomics. Of all its contributions, the insight due to Robert Lucas (1976) remains the most enduring. Put generally, this states that the decision rules (e.g. consumption, money demand and investment functions) of optimizing agents are non-invariant with respect to changes in the decision rule of policy-makers. Equivalently, there is an interdependence between private equilibrium behavior and centralized decision-making. This interdependence invites comparison with game situations. A game is defined as any activity with a certain set of prescribed characteristics. Game theory is the study of games: it is a methodological branch of mathematics devoted to the analysis of conflict and cooperation. My intention in this chapter is to provide a broad, but selective, survey of the application of game theory to the study of monetary policy.

PD November 1990. **TI** Business Cycles in the U.K.: Facts and Fictions. **AU** Blackburn, Keith; Ravn, Morten O. **AA** Blackburn: University of Southampton. Ravn: University of Southampton and University of Aarhus. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9107; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 28. **PR** no charge. **JE** E32. **KW** Economic Fluctuations. Business Cycle. Wages. Prices. Employment.

AB This paper reports on the statistical properties of contemporary business fluctuations in the U.K. We study the period 1956-1990 using quarterly data on key aggregate variables. The data is transformed into stationary time series by means of low-frequency filtering. We compute selected moments of these series, compare our results with those for the U.S. and rigorously test for dynamic instabilities. Our findings confirm the existence of substantive cyclical regularities - more so in real variables than in nominal variables - both across countries and across time. Two of the most notable regularities are the pro-cyclicality of real wages and the counter-cyclicality of prices. The most notable cross-country differences are to be founded in the volatilities of consumption and net exports, and the relative volatilities of employment and hours per worker.

PD 1991. **TI** Equilibrium Policies in Interdependent Monetary Economies. **AU** Blackburn, Keith; Christensen, Morten. **AA** Blackburn: University of Southampton. Christensen: University of Southampton and University of Aarhus. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9105; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 35. **PR** no charge. **JE** E63, E61. **KW** Monetary Policy. Fiscal Policy. Policy Coordination.

AB We study equilibrium monetary and fiscal policies under alternative international monetary arrangements. We do so in a model of two interdependent economies populated by optimizing agents and benevolent governments. In each case,

we distinguish between commitments and discretion, on the one hand, and cooperation and noncooperation, on the other. Our analysis delivers both positive and normative predictions about different institutional environments. We discuss the implications of these and focus, in particular, on the idea of conservatism.

PD January 1991. **TI** Contemporary Macroeconomic Fluctuations: An International Perspective. **AU** Blackburn, Keith; Ravn, Morten O. **AA** Blackburn: University of Southampton. Ravn: University of Southampton and University of Aarhus. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9106; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 56. **PR** no charge. **JE** E32, O57. **KW** Economic Fluctuations. Time Series. Macroeconomics.

AB This paper presents evidence on contemporary macroeconomic fluctuations in ten major OECD countries. Using quarterly data covering the past twenty years, we examine the statistical properties of the lower and higher frequency movements in key aggregate time series. We search for regularities in the data both across countries and across time. Our findings confirm that substantive cross-country and dynamic regularities do, indeed, exist. Attention is drawn to the most notable exceptions.

Blackburn, McKinley L.

PD March 1991. **TI** The Distribution of Family Income: Measuring and Explaining Changes in the 1980s for Canada and the United States. **AU** Blackburn, McKinley L.; Bloom, David E. **AA** Blackburn: University of South Carolina. Bloom: Columbia University. **SR** National Bureau of Economic Research Working Paper: 3659; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** \$2.00. **JE** D31, I38, J11. **KW** Income Distribution. Households. Canada. United States.

AB This paper attempts to measure and explain recent changes in the distributions of family income in Canada and the U.S. using comparable micro-data for the two countries for 1979 and 1987. Three main sets of conclusions are reached. First, the distribution of total family income (pre-tax, post-transfer) in the two countries changed differently in the 1980s. Second, changes in the distribution of transfer income had important influences on the distribution of total family income in both Canada and the U.S. Third, increased income inequality in the U.S. partly reflects increased earnings inequality, which is itself associated with a widening of education-earnings differentials that occurred in the 1980s.

PD May 1991. **TI** Omitted-Ability Bias and the Increase in the Return to Schooling. **AU** Blackburn, McKinley L.; Neumark, David. **AA** Blackburn: University of South Carolina. Neumark: University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 3693; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** \$2.00. **JE** J31, J41, J24. **KW** Education. Wages. Human Capital. Signaling.

AB Over the 1980s there were sharp increases in the return to schooling estimated with conventional wage regressions. We use both a signaling model and a human capital model to explore how the relationship between ability and schooling could have changed over this period in ways that would have

increased the schooling coefficient in these regressions. Our empirical results reject the hypothesis that an increase in the upward bias of the schooling coefficient, due to a change in the relationship between ability and schooling, underlies the observed increase in the return to education over the 1980s. We also find that the increase in the return to education has occurred largely for workers with relatively high levels of academic ability.

Bladen-Hovell, R.

TI The Measurement of Policy Effects in a Non-Causal Model: An Application to Economic Policy in the U.K., 1974-79. **AU** Artis, M. J.; Bladen-Hovell, R.; Ma, Y.

Blake, David

PD 1990. **TI** Financial Intermediation and Financial Innovation in a Characteristics Framework. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 9/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 36. **PR** no charge. **JE** O16, O31, E44. **KW** Financial Markets. Portfolio Choice. Innovation.

AB This paper argues that the characteristics model provides a unifying framework for analyzing both financial intermediation and the process of financial innovation. The role of the financial intermediary is to buy-in the primary liabilities of the firm, unbundle and repackage the characteristics contained in them and issue a set of ultimate assets to households. Assets exist because the balance between the supply of and demand for asset characteristics indicates an interior equilibrium. Financial innovations arise whenever changes in supply and demand induce movements from a corner solution to the interior. A number of existing explanations of financial innovation can be expressed using this framework.

PD 1990. **TI** Portfolio Behavior and Asset Pricing in a Characteristics Framework. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 7/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 24. **PR** no charge. **JE** G11, G12. **KW** Portfolios. Portfolio Choice. Asset Pricing.

AB This paper argues that the characteristics model provides a unifying framework for examining preference-based asset portfolio behavior and asset pricing. In particular, we show that it encompasses a number of very familiar models of portfolio behavior and asset pricing.

PD 1990. **TI** Debt-Equity Swaps as Bond Conversions: Implications for Pricing. **AU** Blake, David; Pradhan, Mahmood. **AA** Blake: Birkbeck College. Pradhan: Bank of England. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 2/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 25. **PR** no charge. **JE** F34, F33. **KW** Bonds. Corporate Debt. Exchange Rate.

AB This paper demonstrates that debt-equity swaps are equivalent to bond conversions. They can therefore be valued using the conventional valuation formula for convertible bonds, although account must be taken of the minimum duration of the equity investment once a swap has taken place. This implies that the swap involves the substitution of default risk for a combination of equity and exchange rate risk, and this has to be

taken into account when valuing the swap. We provide an illustration of the valuation formula.

PD 1990. **TI** Failure in Financial Markets: The Crash of October 1987. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 8/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 24. **PR** no charge. **JE** G12, G14. **KW** Financial Markets. Stock Market.

AB This paper examines what happens when financial markets fail. We examine what failure involves. We also examine the causes and consequences of failure. We should remember that financial markets fail in a serious way very infrequently: only once every fifty years or so in economies with advanced financial systems. But, when it happens, the failure itself can be extremely dramatic and the consequences of failure can be very severe. We will illustrate our analysis by examining the crash of October 1987.

PD February 1991. **TI** The Fisher Hypothesis in Two High, Inflation Economies. **AU** Blake, David; Phylaktis, Kate. **AA** Blake: Birkbeck College. Phylaktis: City University Business School. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 1/91; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 25. **PR** no charge. **JE** E43, E31, O57. **KW** Fisher Hypothesis. Interest Rates. Inflation.

AB This paper examines the long-run relationship between nominal interest rates and the anticipated rate of inflation in two high inflation economies, Argentina and Brazil, during the 1970s and 1980s. We test for the existence of this long-run relationship using co-integration techniques. We also investigate Granger-causality for nominal interest rates and anticipated inflation. Our results, in contrast with much empirical evidence for low inflation countries, lend support to the Fisher Hypothesis.

PD March 1991. **TI** Testing a Non-Linear Model of Portfolio Behavior with Time-Varying Expectations and Risks: The Case of U.K. Private Sector Pension Funds. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 2/91; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 40. **PR** no charge. **JE** G23, G11, D81, D84. **KW** Portfolio Choice. Expectations. Pension Funds.

AB In this paper, we estimate a model of portfolio behavior which extends the standard mean-variance model in three important ways. Firstly, we generalize the mean-variance utility function to allow the marginal rate of substitution between mean and variance to depend on asset holdings; this renders the model nonlinear in assets. Secondly, we model expectations and risks in an explicitly dynamic and forward-looking manner. Thirdly, we model the dynamic adjustment of the portfolio in terms of an error correction mechanism. The model is estimated on the portfolios of U.K. private sector pension funds. Amongst the main findings are that: a constant marginal rate of substitution between mean and variance is rejected; time-varying expectations are important for determining portfolio behavior but that time-varying risks are not; and the error correction mechanism is important for explaining the dynamic adjustment of the portfolio.

Blanchard, Olivier

PD March 1991. **TI** Wage Bargaining and

Unemployment Persistence. AA Massachusetts Institute of Technology. SR National Bureau of Economic Research Working Paper: 3664; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 19. PR \$2.00. JE J64. KW Unemployment. Wages. Bargaining. Labor Market.

AB This paper looks at models of unemployment which make two central assumptions. The first is that wages are bargained between firms and employed workers, and that unemployment affects the outcome only to the extent that it affects the labor market prospects of either employed workers or of firms. The second is that the duration of unemployment affects either the search behavior or the skills of the unemployed, and/or the perceptions of firms of such skills. It argues that such models may explain not only the evolution of European unemployment over the last two decades, an evolution which triggered their development, but many of the cyclical features of labor markets in general.

Blau, Francine D.

PD January 1991. TI The Fertility of Immigrant Women: Evidence from High Fertility Source Countries. AA University of Illinois. SR National Bureau of Economic Research Working Paper: 3608; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 39. PR \$2.00. JE J13, J61, J11. KW Fertility. Immigrants. Children. Households.

AB Using data from the 1970 and 1980 Censuses, we examined the fertility of immigrant women from the Middle East, Asia, Latin America and the Caribbean where fertility rates averaged in excess of 5.5 children per woman during the period of immigration to the U.S. Perhaps the most interesting finding of this study is that immigrants from these on average high fertility source countries were found to have very similar unadjusted fertility to native-born women. The small immigrant-native differential appears to reflect the selectivity of immigrants as a low fertility group both relative to source country populations and to native-born women with similar personal characteristics (a relatively high fertility group in the U.S.).

Blinder, Alan S.

PD March 1991. TI Why are Prices Sticky? Preliminary Results from an Interview Study. AA Princeton University. SR National Bureau of Economic Research Working Paper: 3646; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 25. PR \$2.00. JE M21, D41, D43, E23, E22. KW Prices. Inventories. Production. Business Economics.

AB This paper reports preliminary results from a large research project on business pricing which is currently underway. The idea is to use interviews with actual price setters to assess the validity of a dozen theories of price stickiness. The rather unorthodox (for economists) methodology is defended; the research design is described briefly; and a few results based on the first 72 interviews (out of a projected 200) are presented. This sample suggests that the median firm changes its price annually and that price adjustments typically lag 3-4 months behind shocks to demand or cost.

Blomstrom, Magnus

PD February 1991. TI Host Country Benefits of Foreign Investment. AA Stockholm School of Economics.

SR National Bureau of Economic Research Working Paper: 3615; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 33. PR \$2.00. JE F21, F23. KW Foreign Investment. Productivity. Spillover. Imports.

AB This paper reviews the empirical evidence on the very different conclusions that can be drawn about productivity spillovers of foreign direct investment. It explains the concept of host country spillover benefits, describes the various forms these benefits can take, both within and between industries, and summarizes the evidence regarding the relative magnitudes of the various forms of spillovers. Moreover, the paper discusses host country policy measures which can accelerate both the MNC affiliates' technology imports and the diffusion of their technology in the host economies.

Bloom, David E.

TI The Distribution of Family Income: Measuring and Explaining Changes in the 1980s for Canada and the United States. AU Blackburn, McKinley L.; Bloom, David E.

PD March 1991. TI The Earnings of Linguistic Minorities: French in Canada and Spanish in the United States. AU Bloom, David E.; Grenier, Gilles. AA Bloom: Columbia University. Grenier: University of Ottawa. SR National Bureau of Economic Research Working Paper: 3660; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 37. PR \$2.00. JE J15, J31, J21. KW Minorities. Wages. Wage Differentials. Canada. United States.

AB This paper measures and compares the relative earnings of French and English speakers in Canada, and of Spanish and English speakers in the U.S., in the 1970s and 1980s. In Canada, the earnings gap between French and English speakers narrowed over time, especially in Quebec. This decline appears to have been caused primarily by a sharp increase in the relative demand for French-speaking workers within Quebec during the 1970s and 1980s. By contrast, the earnings gap between Spanish and English speakers in the United States remained high during the 1970s and 1980s and is not largely accounted for by differences in a standard set of control variables.

Blundell, Richard

PD December 1990. TI The Distinction between Income and Consumption in the Measurement of Household Welfare. AU Blundell, Richard; Preston, Ian. AA Blundell: Institute for Fiscal Studies and University College London. Preston: Institute for Fiscal Studies and Nuffield College, Oxford. SR Institute for Fiscal Studies (IFS) Working Paper: W91/1; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, ENGLAND. PG 32. PR 3 pounds. JE D91, D11, I32, D31. KW Consumption. Poverty Measures. Poverty. Income. Intertemporal Model.

AB This paper places the debate over using consumption expenditures or incomes from single period household surveys as measures of individual welfare in a formal intertemporal setting. We assess the reliability of each measure and derive restrictions on preferences that might validate such "snapshot" measures. We also draw attention to the likely importance of labor market status and the stage in the life cycle at which consumption or income is being recorded. Using this analysis, data from the U.K. Family Expenditure Survey are used to investigate the incidence of poverty and the extent to which

consumption and income measures provide differing conclusions. By considering data drawn from the period 1979 to 1987 we are able to assess the stability of our results. We find that analysis by labor market status and stage of the life cycle is critical in understanding differences that may appear in welfare measures based on consumption and income.

Boadway, Robin

PD September 1990. **TI** The Use of Public Expenditures for Distributive Purposes. **AU** Boadway, Robin; Marchand, Maurice. **AA** Boadway: Queens University. Marchand: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9066; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 28. **PR** not available. **JE** H50, D63, H23, H42. **KW** Government Expenditures. Taxes.

AB Governments typically use expenditures extensively as redistributive devices. Examples include the public provision of health, education welfare, and public pensions. The purpose of this paper is to investigate the normative rationale for such policies. In particular, we study the role of government expenditures as purely redistributive devices given that the government also has available to it an optimal nonlinear income tax. We do so in the context of specific types of quasi-private expenditures meant to represent education and pensions, both of which could have been provided privately. We assume that public provision to an individual cannot be related to individual characteristics or income, so it is uniform across individuals. We derive a set of sufficient conditions for the use of public expenditures on the presence of optimal taxes.

PD September 1990. **TI** Pay-As-You-Go Social Security in a Changing Environment. **AU** Boadway, Robin; Marchand, Maurice; Pestieau, Pierre. **AA** Boadway: Queen's University. Marchand: Universite Catholique de Louvain. Pestieau: Universite de Liege and Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9054; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 27. **PR** not available. **JE** H55, D91, H31. **KW** Social Security. Overlapping Generations Model. Social Welfare Function. Taxes.

AB In this paper, we examine the optimal pay-as-you-go social security scheme which reallocates resources across generations in a changing environment, that is, with fluctuations in population growth rates and in productivity levels. We use an overlapping generations model along with a social welfare function consisting of the sum of generational utilities. We show how intergenerational resource sharing can be used to improve social welfare even though the extent of intergenerational redistribution is hampered by payroll tax deadweight losses in the spirit of the optimal taxation literature. Also it appears that resource sharing is much more restricted in a closed economy than in an economy which is not subject to a national resource constraint at each period of time.

Bofinger, Peter

PD February 1991. **TI** The Political Economy of the Hard-ECU Proposal. **AA** Landeszentralbank in Baden-Wurtemberg. **SR** Centre for Economic Policy Research Discussion Paper: 512; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 24. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3)

companies, libraries, institutions. **JE** F36, F15. **KW** Currency. European Community. Economic Integration. **AB** The paper shows that the conversion from national currency bank notes to hard-ECU notes is promoted by the provision of an implicit and free currency call option. This wealth effect is caused by the devaluation-proof definition of this currency. Nevertheless, additional transactions and information costs would keep the demand for hard-ECUs very limited. Because of such externalities the market does not lead to a Pareto efficient arrangement for the European monetary order. At best the hard-ECU would out compete currencies of EC countries with above average inflation rates, while national currencies would remain in use in the other EC countries. In addition, the competition process is distorted by the subsidy character of the implicit option.

PD April 1991. **TI** Options for the Payments and Exchange Rate System in Eastern Europe. **AA** Landeszentralbank in Baden-Wurtemberg. **SR** Centre for Economic Policy Research Discussion Paper: 545; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 33. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** P52, E42, E52, F31, F33. **KW** Europe. Currency. Economic Reform. Exchange Rate. Monetary Policy.

AB The paper analyzes the role of currency convertibility in the process of economic transition in Eastern Europe and discusses alternative institutional options for achieving this difficult task. It shows that an early transition to convertibility is an indispensable requirement for the success of real sector reforms but that this is only sustainable if the existing flow and stock disequilibria are removed. The options of flexible rates and an East European Payments Union seem less demanding in terms of internal financial stringency, but the former would lead to a high degree of exchange rate instability and the latter would only provide a very limited foreign impact on the domestic restructuring. The paper, therefore, focuses on fixed rate solutions (or adjustable pegs with a preannounced depreciation rate).

Bond, Stephen

PD November 1990. **TI** Dynamic Investment Models and the Firm's Financial Policy. **AU** Bond, Stephen; Meghir, Costas. **AA** Bond: Institute of Economics and Statistics, Nuffield College, Oxford and Institute for Fiscal Studies. Meghir: Institute of Fiscal Studies and University College London. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/17; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, ENGLAND. **PG** 44. **PR** 3 pounds. **JE** G31, G32. **KW** Investment. Corporate Finance. Capital Structure.

AB The aim of this paper is to characterize the empirical implications for dynamic investment models of the hierarchy of finance model of corporate finance and to test these implications using firm level data. The model we estimate is based on the Euler equation for optimal capital accumulation in the presence of convex adjustment costs. The theoretical model explicitly allows for debt finance and considers the implications of allowing the firms to accumulate financial assets. The empirical investigation uses U.K. company panel data to estimate dynamic investment models using GMM and to test the derived implications.

Booth, Alison

PD January 1991. **TI** Reputation, Membership and Wages in an Open Shop Trade Union. **AU** Booth, Alison; Chatterji, Monojit. **AA** Booth: Birkbeck College. Chatterji: University of Dundee. **SR** Birkbeck College Discussion Paper in Economics: 1/91 ; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 29. **PR** no charge. **JE** J51, J31, J41. **KW** Trade Unions. Reputation. Wages.

AB In Britain there is no longer statutory support for the closed shop. It is therefore of interest to examine the predictions of an open shop model of union wage and membership determination. The paper develops a monopoly union model in which membership is not compulsory. A prediction of the model is that there is a minimum critical membership density and supporting wage below which union existence is not viable. Unless the union can provide an excludable good or service that is increasing in membership, than union existence cannot be guaranteed. Furthermore, adverse shocks to the currently unionized sector may drive membership to zero and wages to the competitive level. These predictions contrast with the usual monopoly union model where membership is fixed at 100 per cent, where adverse shocks do not affect union existence, and wages are always above the competitive level.

Borjas, George J.

PD January 1991. **TI** National Origin and the Skills of Immigrants in the Postwar Period. **AA** University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 3575; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** \$2.00. **JE** J61, J24, F22. **KW** Immigration. Human Capital.

AB The postwar period witnessed major changes in U.S. immigration policy and in economic and political conditions in many of the source countries. As a result, the size, origin, and skill composition of immigrant flows changed substantially. This paper uses the Public Use Samples of the five decennial Census between 1940 and 1980 to document the extent of these changes. The empirical analysis yields two substantive results. First, almost all of the measures of skills or labor market success available in the data document a steady deterioration in the skills and labor market performance of successive immigrant waves over the postwar period, with this trend accelerating since 1960. Second, the study suggests that a single factor, the changing national origin mix of the immigrant flow, is almost entirely responsible for this trend.

PD April 1991. **TI** Immigration Policy, National Origin, and Immigrant Skills: A Comparison of Canada and the United States. **AA** University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 3691; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** \$2.00. **JE** J61, J68, J24. **KW** Immigration. Human Capital. Labor Mobility. Public Policy.

AB Over 12 million persons migrated to Canada or the United States between 1959 and 1981. Beginning in the mid-1960s, the immigration policies of the two countries began to diverge considerably: the United States stressing family reunification and Canada stressing skills. This paper shows that the point system used by Canada generated, on average, a more skilled immigrant flow than that which entered the United

States. This skill gap, however, is mostly attributable to differences in the national origin mix of the immigrant flows admitted by the two countries. In effect, the point system "works" because it alters the national origin mix of immigrant flows, and not because it generates a more skilled immigrant flow from a given source country.

Bossaerts, Peter

PD June 1991. **TI** Noisy Signalling in Financial Markets. **AU** Bossaerts, Peter; Hughson, Eric. **AA** California Institute of Technology. **SR** Caltech Social Science Working Paper: 764; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 34. **PR** no charge. **JE** G14, D82, D52. **KW** Signaling. Financial Markets. Noise. Repeated Games. Insiders.

AB Separating signaling equilibria of financial markets with anonymous insiders are investigated. Definitions of separating signaling equilibria are extended to allow for the noise that provides anonymity. The role of noise in equilibrium existence results is clarified. In particular, the result of Glosten and Madhavan, that noise is necessary for dealer markets to remain open, is qualified. The separating signaling equilibrium is written as the solution to a central planner's problem. Besides facilitating computation, this formulation highlights: (i) the critical nature of incentive compatibility constraints, (ii) the welfare aspects. The former causes many equilibrium price-quantity schedules to be nonlinear and nondifferentiable. An analysis of the latter leads to the conclusion that Pareto efficient outcomes can be approximated by a repeated version of an insider game.

Boyer, Robert

PD September 1989. **TI** Economies and History: Towards a New Alliance? **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 8925; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 80. **PR** 25 F. **JE** B22, B41, N01. **KW** Economic History. Economic Theory. Methodology. Macroeconomics.

AB Since the thirties, economists and historians have seemingly followed different strategies for economic history. Axiomatization, mathematic and econometric sophistication on one side, investment in numerous new territories on the other. Of course, the New Economic History has brought precision, clarity and some cumulateness, but frequently leads to a timeless history. As R. Solow pointed out, economic history has both been enriched and corrupted by modern economic analysis, assumed to be true everywhere and any time. Nowadays, this conception does not cope with emergent problems. The results from New Economic History are at best mitigated, sometimes very disappointing. Still worse, in the eighties, not any modern theory or model coped with the whole set of stylized facts. This paper is a plea for a new alliance which would build a genuine economic analysis, widely open upon historicity and path dependency and would draw on past major findings in economic history in the spirit of Annales. Paper in French.

PD February 1990. **TI** The Impact of 1992 upon Labor and Unemployment: Contrasting Macroeconomic Approaches with Labor Economics Research. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9005; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 50. **PR** 25 F. **JE** F22, F15, F12. **KW** Learning. European

Community. Labor Mobility. Migration. Industrial Relations. Industrialization.

AB The theoretical foundations and empirical findings from European Community economists are investigated. The micro and macro assessments of market integration seem to suffer from many uncertainties: the roots for dynamic increasing returns to scale, a key feature, are not clearly exhibited, static effects being privileged. Too many studies are silent upon the role of labor in learning by doing, accepting mobility from one job to another, possibly lower wages at least during the transitory period. Still more, Keynesian effects about medium-term expectations and investment decisions are underestimated, as shown by 1988-1989 evolutions. Finally, beyond short-run macroeconomic adjustment, the crucial issue might be the future of industrial relations in Europe.

PD July 1990. **TI** The Economics of Job Protection and Emerging Capital Labour Relations: From the Perspective of "Regulation Theory". **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9015; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 80. **PR** 25 **F. JE** J53, J61, O11, M12. **KW** Labor Mobility. Industrialization. Economic Development.

AB The issue about job preservation is analyzed according to previous historical analysis and comparative studies along the "regulation approach". First it is argued that the very success of the fordist capital relations and the related institutional changes after WWII brought milder recessions and therefore strongly mitigated the need for downward employment adjustments. But the unfolding of the structural crisis of this growth regime has led to a significant shift of firms and government strategies: all along the eighties, they have been promoting labor mobility and various forms of social deregulation. Nevertheless, in the early nineties, these defensive strategies seem to be overcome by the implementation of a follower to fordism, in order to solve its previous imbalances and contradictions. Within these new principles, employment stability can be a strength not a drawback.

PD September 1990. **TI** The Capital Labor Relations in OECD Countries: From the Fordist "Golden Age" to Contrasted National Trajectories. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9020; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 61. **PR** 25 **F. JE** O11, O57, J53, M12, M14. **KW** Labor Relations. Wages.

AB This paper reviews the transformations of capital-labor relations from the fifties to the early nineties for eight OECD countries: Austria, France, Italy, Japan, Sweden, United Kingdom, United States and West Germany. In most countries a genuine fordist compromise took place: workers accepted mechanization and labor division against a new wage formula and the implementation of a welfare system. Nevertheless, various national configurations, with significant differences in work organization and industrial relations were observed. This international and national growth regime seems to have broken down after the seventies' and this demise of the fordist capital-labor relations has triggered drastic changes in labor organizations, work process, wage formation, welfare. It is argued that these transformations are very likely to be structural and far reaching for social integration and economic dynamics.

PD December 1990. **TI** The Transformations of Wage Systems, between Economic Theory and History: From Henry Ford to American Fordism. **AU** Boyer, Robert; Orlean,

Andre. **AA** Boyer: CEPREMAP. Orlean: CREA, France. **SR** CEPREMAP Discussion Paper: 9029; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 66. **PR** 25 **F. JE** J31, J53, O11, M12. **KW** Wages. Wage Structure. Labor Relations. Economic Development.

AB Game theory and the economics of conventions are used in order to enlighten a crucial issue for the "regulation" approach: how the fordist wage norm has emerged in the United States? A simple model suggests the absence of any endogenous mechanisms providing such a transition. An historical analysis of the five dollars day policy by Henry Ford confirms the multiplicity of the obstacles to its diffusion: a very partial internalization by the firm of the related benefits, the contradictory implications of Americanism, the rise of collective actors and collective agreements, the inability of any firm, however large, to alter macroeconomic equilibrium and the complementarities between the various conventions associated with fordism. A two fold paradox comes out: truly existing American fordism will be at odds with the genuine project of Henry Ford, whereas Toyotism will be a very precise but unintentional implementation of these ideas in Japan. Paper in French.

Boylan, Richard

PD April 1990. **TI** Equilibria Resistant to Mutation. **AA** California Institute of Technology. **SR** Caltech Social Science Working Paper: 729; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 18. **PR** no charge. **JE** C73, C72. **KW** Symmetric Games. Evolution. Evolutionary Games.

AB The paper requires that equilibrium behavior for two person symmetric games be resistant to genetic evolution. In particular, the paper assumes that the evolution of genotypes selecting a behavioral rule can be described according to some generalization of the replicator model. This paper defines an equilibrium concept, "evolutionary equilibrium", which is defined as the limit of stationary points of the evolutionary process as the proportion of the population that mutates goes to zero. Then the set of evolutionary equilibria, as defined in the paper, is a nonempty subset of the set of perfect equilibria (and thus of the set of Nash equilibria) and a superset of the set of regular equilibria and the set of ESS.

Brams, Steven J.

TI Yes-No Voting. **AU** Fishburn, Peter C.; Brams, Steven J.

Bronsard, Camille

PD September 1990. **TI** From a Hicks-Grandmont Temporary Equilibrium to a Rational Expectations Equilibrium and Conversely. **AU** Bronsard, Camille; Salvas-Bronsard, L.; Trognon, A. **AA** Bronsard: CEPREMAP and University of Montreal. Salvas-Bronsard: INSEE and University of Montreal. Trognon: INSEE. **SR** CEPREMAP Discussion Paper: 9025; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 18. **PR** 20 **F. JE** D11, D84. **KW** Rational Expectations. Prices. Demand.

AB A condition is given under which a Hicks-Grandmont equilibrium is a rational expectations equilibrium. A generic converse holds: the condition is recovered when a rational expectations equilibrium is a Hicks-Grandmont equilibrium. Finally, the condition can be used to decompose the price effect

and scrutinize the "interior" of the REH. A "law of demand" supposes a further axiomatization of the Roy-consistency type.

PD October 1990. **TI** The Producer and the Real Balance Effect. **AU** Bronsard, Camille; Ouellette, P.; Salvas-Bronsard, L. **AA** Bronsard: CEPREMAP and University of Montreal. Ouellette: Quebec University of Montreal. Salvas-Bronsard: INSEE and University of Montreal. **SR** CEPREMAP Discussion Paper: 9026; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 23. **PR** 20 F. **JE** D21, D24. **KW** Hotelling Lemma. Real Balance Effect. Factor Demand Function.

AB In this paper, an axiomatization of expectation functions is presented such that a generalized Hotelling lemma can be stated in a temporary context (an economy where exchange occurs sequentially). The Modigliani-Miller theorem is recovered when this lemma is reduced to the classical Hotelling's lemma through further restrictions on expectations. A complete system of conditional factor demand functions is characterized when the generalized Hotelling lemma is transformed into a generalized Shephard lemma. The Modigliani-Miller theory is directly testable via the structure of real balance effects.

Buiter, Willem H.

PD February 1991. **TI** Persistent Differences in National Productivity Growth Rates with Common Technology and Free Capital Mobility: The Roles of Private Thrift, Public Debt, Capital Taxation and Policy towards Human Capital Formation. **AU** Buiter, Willem H.; Kletzer, Kenneth M. **AA** Yale University. **SR** National Bureau of Economic Research Working Paper: 3637; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 54. **PR** \$2.00. **JE** O41, O47. **KW** Growth Model. Productivity. Human Capital.

AB The paper develops a two-country endogenous growth model to investigate possible causes for the existence and persistence of productivity growth differentials between nations despite a common technology, constant returns to scale and perfect international capital mobility. Private consumption is derived from a three-period overlapping generations specification. The source of productivity (growth) differentials in our model is the existence of a non-traded capital good ("human capital") whose augmentation requires a non-traded current input (time spent by the young in education rather than leisure). We consider the influence on productivity growth differentials of private thrift, public debt, the taxation of capital and savings and of policy towards human capital formation.

Burda, Michael C.

PD December 1990. **TI** Exchange Rate Dynamics and Currency Unification: The Ostmark-DM Rate. **AU** Burda, Michael C.; Gerlach, Stefan. **AA** Burda: INSEAD, France. Gerlach: Brandeis University. **SR** Centre for Economic Policy Research Discussion Paper: 485; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 18. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, F36, O52. **KW** Exchange Rate. Monetary Union. Germany.

AB This paper studies the exchange rate between the East and West German mark in the period before German monetary union. We show that standard exchange rate theory contains strong predictions about the dynamics of the exchange rate under these circumstances, and we use state-space methods to

estimate key parameters of the model. A random walk model gives a good fit to the first half of the data, during which it was unclear that monetary union would occur. In the second half, when union was expected, the Ostmark rate behaves as a weighted average of fundamentals and the expected terminal exchange rate.

PD April 1991. **TI** Labor and Product Markets in Czechoslovakia and the Ex-GDR: A Twin Study. **AA** INSEAD, France. **SR** Centre for Economic Policy Research Discussion Paper: 548; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 41. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** O52, P52, L33. **KW** Europe. Economic Reform. Economic Development. Privatization.

AB Pre-reform similarities between the ex-German Democratic Republic and Czechoslovakia serve as a basis for comparing two different approaches to marketizing centrally planned economies. The GDR freed trade in goods and fixed the exchange rate first, then liberalized domestic price setting, and took up privatization and budgetary consequences last; the CSFR is striving to implement the same reforms in reverse order. While the exchange rate matters decisively in the short-run, institutional aspects of the two countries such as financing constraints, collective bargaining, and unemployment benefits will prove most important for long-run development of the two regions.

Burkinshaw, Owen

TI When is the Core Equivalence Theorem Valid? **AU** Aliprantis, Charalambos D.; Burkinshaw, Owen.

TI An Overlapping Generations Model Core Equivalence Theorem. **AU** Aliprantis, Charalambos D.; Burkinshaw, Owen.

Burnside, Craig

PD December 1990. **TI** Labor Hoarding and the Business Cycle. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio. **AA** Burnside: Queen's University. Eichenbaum and Rebelo: Northwestern University. **SR** National Bureau of Economic Research Working Paper: 3556; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** \$2.00. **JE** J23, E32, E24, J24. **KW** Business Cycle. Labor Demand. Technology. Labor Productivity.

AB Existing Real Business Cycle (RBC) models assume that the key impulses to business cycles are stochastic technology shocks. RBC analysts typically measure these technology shocks by the Solow residual. This paper assesses the sensitivity of inference based on Solow residual accounting to labor hoarding behavior. Our main results can be summarized as follows. First, the quantitative implications of RBC models are very sensitive to the possibility of labor hoarding. Second, our labor hoarding model is capable of quantitatively accounting for the observed correlation between government consumption and the Solow residual. Third, unlike standard RBC models, our labor hoarding model is consistent with three important qualitative features of the joint behavior of average productivity and hours worked.

Caballero, Ricardo J.

TI Sustainable Intervention Policies and Exchange Rate

Dynamics. AU Bertola, Giuseppe; Caballero, Ricardo J.

TI Sourcing Externalities. AU Bartelsman, Eric J.; Caballero, Ricardo J.; Lyons, Richard K.

Cable, J.

TI Labor Managed vs. Private Firms: An Empirical Comparison of Cooperatives and Private Firms in Central Italy. AU Bartlett, W.; Cable, J.; Estrin, S.; Jones, D.; Smith, S.

Caillaud, Bernard

PD December 1990. TI On Precommitment Effects between Competing Agencies. AU Caillaud, Bernard; Jullien, Bruno; Picard, Pierre. AA Caillaud and Jullien: CEPREMAP. Picard: CEPREMAP and University of Paris X. SR CEPREMAP Discussion Paper: 9033; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 38. PR 20 F. JE C78, D82. KW Negotiations. Principal-Agent Model. Contracts. Adverse Selection.

AB We analyze a game situation where two principal-agent structures interact after having signed (adverse selection) contracts. Contracts can be publicly disclosed but they can also always be renegotiated secretly. Public disclosure of contracts may induce precommitment effects and affect the opponent's behavior by granting an informational rent to the agent larger than if contracts were unobservable: this cannot be undone in renegotiations since the agent would refuse to forgo this rent. Such precommitment effects exist in particular in Cournot-like situations. The general analysis hinges on whether actions are strategic substitutes or complements, and on the effect of one agent's action on the rival agency's aggregate payoff.

Cameron, A. Colin

PD March 1991. TI Regression Based Tests of Heteroskedasticity in Models Where the Variance Depends on the Mean. AA University of California at Davis. SR University of California at Davis Economics Department Working Paper: 379; Department of Economics, University of California at Davis, Davis, California 95616-8578. PG 35. PR no charge. JE C12, C22, C21, C52. KW Heteroskedasticity. Overdispersion. Heterogeneity. Score Tests. Lagrange Multiplier Tests. Specification Tests. Generalized Linear Model. Exponential Family.

AB In many regression models, the variance conditional on regressors depends in part on the conditional mean. For example, generalized linear models and power of the mean models have this property. For such models, this paper proposes tests of the assumed heteroskedasticity against an alternative more general form of heteroskedasticity, conditional on correct specification of the mean. Given parameter estimates under the null hypothesis, the tests are simply implemented by univariate OLS regressions. When the variance is a function of the mean alone, one regression is required, while if the variance is an unknown scalar multiple of a function of the mean alone, two regressions are required. These tests require specification of the first two moments, rather than the complete distributions, under the null and alternative hypotheses.

Cameron, Lisa

TI The Effect of Union Membership on Occupational Pension Coverage in Britain: A Disaggregated Analysis. AU Disney, Richard; Cameron, Lisa.

Canning, David

PD September 1990. TI Average Behaviour in Learning Models. AA Pembroke College, Cambridge. SR University of Cambridge Economic Theory Discussion Paper: 156; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 34. PR \$4.00 (2.00 pounds); checks payable to University of Cambridge. JE D83, C70, D11, D21. KW Learning. Memory. Overlapping Generations Model.

AB We examine a general class of adaptive behavior models in which agents have bounded memory and sometimes make mistakes to show that average behavior (averaged over time) converges, with probability one, to a unique limit. Without mistakes we do not have convergence or uniqueness of equilibrium; mistakes generate global convergence and are an equilibrium selection device. Bounded memory and mistakes are implicit in overlapping generations models; death limits memory and the newborn make mistakes. In models with a large number of independent villages we derive the convergence of average behavior (averaged over the villages) to a unique steady state.

Cappuccio, Nunzio

PD June 1990. TI Testing Exogeneity in Overidentified Models. AU Cappuccio, Nunzio; Orsi, Renzo. AA Cappuccio: University of Padova. Orsi: University of Bologna. SR Universite Catholique de Louvain CORE Discussion Paper: 9042; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. PG 23. PR not available. JE C12, C22, C51. KW Exogeneity Tests. Limited Information Models. Overidentifying Restrictions. Maximum Likelihood.

AB In this paper we analyze the consequences of model overidentification on testing exogeneity, when maximum likelihood techniques for estimation and inference are used. This situation is viewed as a particular case of the more general problem of considering how restrictions on nuisance parameters could help in making inference on the parameters of interest. At first a general model is considered. A suitable likelihood function factorization is used which allows a simple derivation of the information matrix and other tools useful for building up joint tests of exogeneity and overidentifying restrictions both of Wald and Lagrange Multiplier type. The asymptotic local power of the exogeneity test in the just-identified model is compared with that in the overidentified one, when we assume that this last is the true model.

Card, David

PD January 1991. TI Intertemporal Labor Supply: An Assessment. AA Princeton University. SR National Bureau of Economic Research Working Paper: 3602; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 38. PR \$2.00. JE J22, D91. KW Labor Supply. Life Cycle Model.

AB The life cycle labor supply model has been proposed as an explanation for various dimensions of labor supply, including movements over the business cycle, changes with age, and within-person variation over time. According to the model, all of these elements are tied together by a combination of intertemporal substitution effects and wealth effects. This paper offers an assessment of the model's ability to explain the main components of labor supply, focusing on microeconomic

evidence for men.

Cardoso, Eliana

PD January 1991. **TI** From Inertia to Megainflation: Brazil in the 1980s. **AA** Tufts University. **SR** National Bureau of Economic Research Working Paper: 3585; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 41. **PR** \$2.00. **JE** O54, E31, E63, F31. **KW** Inflation. Brazil. Public Debt. Monetary Policy. Devaluation.

AB This paper discusses the acceleration of inflation in Brazil. In the early 1980s, the Brazilian inflation rate increased in good measure because of the balance of payments crisis and because of large depreciations of the cruzeiro. The Cruzado Plan failed to stop inflation because of an extremely loose monetary policy coupled with a lack of fiscal austerity. Repeated price controls have increased the variability of inflation. More recently, the decline in tax collections and the growth of interest payments on a ballooning domestic debt have built up a massive fiscal problem. Flight from money has further aggravated Brazilian inflation. Two steps are used in explaining the Brazilian inflationary process: the analysis of price freezes in the context of sustained fiscal imbalance and the research on the consequences of different fiscal deficit financing forms.

PD February 1991. **TI** Capital Formation in Latin America. **AA** Tufts University. **SR** National Bureau of Economic Research Working Paper: 3616; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 41. **PR** \$2.00. **JE** O54, F41, F43, F21. **KW** Latin America. International Investment. Economic Growth. Exchange. Capital. Open Economy.

AB This paper studies investment in Latin America and explores the relationships of investment with growth, exchange rates and the terms of trade. It addresses the theoretical issue of the relationship between the real exchange rate and the real price of capital with a model of a small open economy with four assets. It discusses the dynamics of both the real prices of capital and the real exchange rate in response to different shocks, including a change on monetary policy, an increase in external interest rates and a deterioration of the terms of trade. In the model (with a nominal exchange rate rule fixed by the central bank) a deterioration of the terms of trade leads to an immediate decline of the real price of capital, followed by a depreciating real exchange rate while the real price of capital slowly recovers.

Casella, Alessandra

PD December 1990. **TI** Public Goods in Trade: On the Formation of Markets and Political Jurisdictions. **AU** Casella, Alessandra; Feinstein, Jonathan S. **AA** Casella: University of California, Berkeley. Feinstein: Stanford University. **SR** National Bureau of Economic Research Working Paper: 3554; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** \$2.00. **JE** F15, F14, H41. **KW** Public Good. Political Economy. Common Market. Trade Model. Economic Integration.

AB The current debate in Western Europe centers on the relationship between economic and political integration. To address this problem, we construct a simple general equilibrium model in which the returns to trading are directly affected by the availability of a public good. In our model, heterogeneous

agents choose both a club and a market to belong to. In the club, agents vote over the public good, are taxed to finance this good, and receive access to it when they trade. In the market, they are randomly matched with a partner. If a match occurs between traders of different clubs, they both suffer a transactions cost. We show that, in general, the political boundaries established by the clubs can be distinct from market borders, leading to international trade between members of different clubs.

PD February 1991. **TI** Public Goods in Trade: On the Formation of Markets and Political Jurisdictions. **AU** Casella, Alessandra; Feinstein, Jonathan S. **AA** Casella: University of California, Berkeley. Feinstein: Stanford University. **SR** Centre for Economic Policy Research Discussion Paper: 511; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 44. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F15, O18, O19. **KW** Economic Integration. Public Goods. Political Jurisdictions. European Community. Common Market. International Trade.

AB The current debate in Western Europe centers on the relationship between economic and political integration. To address this problem, we construct a simple general equilibrium model in which the returns to trading are directly affected by the availability of a public good. In our model heterogeneous agents choose both a club and a market to belong to. In the club, agents vote over the public good, are taxed to finance this good, and receive access to it when they trade. In the market, they are randomly matched with a partner; if a match occurs between traders of different clubs they both suffer a transactions cost. We show that, in general, the political boundaries established by the clubs can be distinct from market borders, leading to international trade between members of different clubs.

Cass, David

PD 1990. **TI** Real Indeterminacy from Imperfect Financial Markets: Two Addenda. **AA** University of Pennsylvania. **SR** CEPREMAP Discussion Paper: 9028; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 68. **PR** 25 F. **JE** D51, D52, D11, E40. **KW** General Equilibrium Model. Consumption. Financial Markets. Money Demand. Equilibrium Allocation.

AB This paper considers a competitive, pure exchange model in which households face exogenous restrictions on participating in the market for inside financial instruments. It is well-known that, except when the yields from financial instruments are denominated in commodities, such market imperfections lead to substantial indeterminacy in equilibrium allocation. So two further issues are examined: First, does the introduction of the institution of fiat or outside money reduce or eliminate this real indeterminacy? Second, if the number of households having access to less than a complete financial market is insignificant, then is the extent of real indeterminacy also insignificant?.

PD 1990. **TI** Indefinitely Sustained Consumption Despite Exhaustible Natural Resources. **AA** University of Pennsylvania. **SR** CEPREMAP Discussion Paper: 9027; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 51. **PR** 25 F. **JE** O41, O11, Q32. **KW** Consumption. Exhaustible Resources. Natural Resources.

AB This paper analyzes the feasibility of sustaining uniformly positive consumption forever -- even when flows of exhaustible resources are an indispensable input. The main result is a characterization of an economy's capability for sustaining such consumption -- under quite general assumptions on technology -- in terms of a single, simple capital-resource substitution condition.

Catephores, George

PD August 1990. **TI** From NEP to Perestroika: Continuity and Discontinuity in Soviet Economic Reform. **AA** University College London. **SR** University College London Discussion Paper: 90-12; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. **PG** 37. **PR** 2.00 pounds. **JE** P27, O53, L33. **KW** Economic Reform. Privatization. Soviet Union.

AB The paper defends the thesis that between the New Economic Policy of the 1920s and the Perestroika of today a chain of institutional and behavioral continuity, which not even the onset of the Command Economy under Stalin could totally disrupt, can be traced. The labor market, the consumer goods market, peasant petty trade and the persistence of money are highlighted for special comment. After 1953 the residual NEP institutions began gradually to revive, partly as instruments of official policy, partly under their own recovered momentum. Struggle for enterprise independence and the spread of monetization were the two most significant unofficial forces pressing towards the restoration of a significant element of private interest in the economy, in the pattern of NEP and beyond. Perestroika constitutes an official response to and acknowledgement of these trends.

Chatterji, Monojit

TI Reputation, Membership and Wages in an Open Shop Trade Union. **AU** Booth, Alison; Chatterji, Monojit.

Che, Yeon-Koo

TI Decoupling Liability: Optimal Incentives for Care and Litigation. **AU** Polinsky, A. Mitchell; Che, Yeon-Koo.

Choi, Frederick D. S.

PD January 1991. **TI** International Accounting Diversity: Does it Impact Market Participants? **AU** Choi, Frederick D. S.; Levich, Richard M. **AA** New York University. **SR** National Bureau of Economic Research Working Paper: 3590; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** \$2.00. **JE** M41, F21, G15, F36. **KW** Capital Markets. Accounting. International Markets. Economic Integration.

AB While many indicators point to the globalization of capital markets, one barrier may persist -- International Accounting Diversity. Even though coordination of many national policies is gaining favor, the measurement and disclosure principles that underlie financial statements remain largely a nationalistic affair. In this paper, we analyze the channels through which accounting diversity affects financial statements. Accounting differences may affect cash flows and lead to a direct affect on valuation. Accounting differences may also affect balance sheet items and measures of capital adequacy or credit worthiness that indirectly affect managerial decisions and firm valuation.

Chou, Chien-Fu

PD March 1991. **TI** Technology Revolutions and the Gestation of New Technologies. **AU** Chou, Chien-Fu; Shy, Oz. **AA** Chou: State University of New York at Albany. Shy: Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 13-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 20. **PR** no charge. **JE** O31, O41, D92. **KW** Innovation. Growth Model. Economic Growth. Technology.

AB We formalize Schumpeter's explanation of technological progress and growth cycles in a model where consumers and firms benefit from periodic changes in technology which result in the development and marketing of new generations of products. We develop a general equilibrium dynamic differentiated products model in order to explain technological progress via cyclical changes in investment, output, and interest rates as well as the introduction of new products. We characterize the equilibrium and analyze the effect of changes in the rate of technological growth, resource endowment, and costs of R&D and production on the duration of generations of products and the frequency of technology revolutions, and hence of growth cycles.

Chou, Ray

PD March 1991. **TI** Measuring Risk Aversion from Excess Returns on a Stock Index. **AU** Chou, Ray; Engle, Robert F.; Kane, Alex. **AA** Chou: Georgia Institute of Technology. Engle and Kane: University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 3643; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** \$2.00. **JE** G11, G12. **KW** Stock Market. Risk Aversion. Asset Prices. Portfolio.

AB We distinguish the measure of risk aversion from the slope coefficient in the linear relationship between the mean excess return on a stock index and its variance. Even when risk aversion is constant, the latter can vary significantly with the relative share of stocks in the risky wealth portfolio, and with the beta of unobserved wealth on stocks. We introduce a statistical model with ARCH disturbances and a time-varying parameter in the mean (TVP ARCH-M). The model decomposes the predictable component in stock returns into two parts: the time-varying price of volatility and the time-varying volatility of returns.

Christensen, Morten

TI Equilibrium Policies in Interdependent Monetary Economies. **AU** Blackburn, Keith; Christensen, Morten.

Christiano, Lawrence J.

PD January 1991. **TI** The Permanent Income Hypothesis Revisited. **AU** Christiano, Lawrence J.; Eichenbaum, Martin; Marshall, David. **AA** Christiano: Federal Reserve Bank of Minneapolis. Eichenbaum: Northwestern University, National Bureau of Economic Research, and Federal Reserve Bank of Chicago. Marshall: Northwestern University. **SR** Federal Reserve Bank of Minneapolis Staff Report: 129; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 45. **PR** no charge. **JE** D21, E21. **KW** Permanent Income. Time Aggregation. Consumption. Martingale.

AB Measured aggregate U.S. consumption does not behave

like a martingale. This paper develops and tests two variants of the permanent income model that are consistent with this fact. In both variants, we assume agents make decisions on a continuous time basis. According to the first variant, the martingale hypothesis holds in continuous time and serial persistence in measured consumption reflects only the effects of time aggregation. We investigate this variant using both structural and theoretical econometric models. The evidence against these models is far from overwhelming. This suggests that the martingale hypothesis may yet be a useful way to conceptualize the relationship between aggregate quarterly U.S. consumption and income.

Christofides, Louis N.

PD March 1991. **TI** Efficient and Inefficient Employment Outcomes: A Study Based on Canadian Contract Data. **AU** Christofides, Louis N.; Oswald, Andrew J. **AA** Christofides: University of Guelph. Oswald: Dartmouth College. **SR** National Bureau of Economic Research Working Paper: 3648; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$2.00. **JE** J41, J51, E24. **KW** Unions. Labor Demand. Bargaining. Employment. Wages. Wage Contracts. **AB** This paper estimates employment equations based on the traditional labor demand model and modern efficient bargain theory using data drawn from wage contracts signed in the Canadian private unionized sector between 1978 and 1984. Contrary to the labor demand model predictions, the alternative wage rate is consistently significant and has the negative coefficient predicted by efficient bargain theory. Though a credible labor demand model can sometimes be estimated, the results are sensitive to the assumed market structure and to the introduction of alternative wage and unemployment insurance variables. Non-nested tests favor efficient bargain specifications.

Church, Jeffrey

PD February 1991. **TI** Network Effects and Software Provision. **AU** Church, Jeffrey; Gandal, Neil. **AA** Church: University of Calgary. Gandal: Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 8-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 33. **PR** no charge. **JE** L86, M31. **KW** Networks. Computer Software. Marketing. Information Services. **AB** We examine the decision of a software firm about which network to provide software for. There are two opposing effects on software profitability as the number of software products available for a network increases. On one hand, the value of the hardware is enhanced; this leads to more sales of hardware and thus increases software profitability. This is the network effect. On the other hand, more software firms on the network lead to greater competition and lower sales and profits for each software firm. This is the competitive effect. If the competitive effect dominates, both hardware technologies will have sales in equilibrium, since software will be provided for both. The paper derives conditions under which there will be a single hardware technology or two hardware technologies in equilibrium. We show that when consumers place high value on the number of hardware products available for a technology, there is a suboptimal amount of standardization in the market.

PD February 1991. **TI** Complementary Network Externalities and Technological Adoption. **AU** Church,

Jeffrey; Gandal, Neil. **AA** Church: University of Calgary. Gandal: Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 5-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 26. **PR** no charge. **JE** L86, O31, O32, L11. **KW** Technology. Networks. Computer Software.

AB We address the adoption of technology when there are network externalities and networks are characterized by complementary products produced by different firms. We show that the market outcome is efficient if the software firms are monopolistic competitors. If the software firms are Bertrand competitors, a hardware technology with lower software development costs is adopted for many parameter values for which it is socially optimal to adopt the other technology. The over-adoption is due to a discrepancy between the private and social value of having a larger network: this divergence is increasing in the software development costs. We also examine various contractual arrangements between hardware firms and software firms which internalize the network externality.

PD March 1991. **TI** Product Differentiation: Bertrand Competition versus Monopolistic Competition. **AU** Church, Jeffrey; Gandal, Neil. **AA** Church: University of Calgary. Gandal: Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 10-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 7. **PR** no charge. **JE** D43, L13. **KW** Differentiated Products. Nash Equilibrium. Bertrand Competition. Monopolistic Competition.

AB Using a representative consumer specification in a differentiated products model, we derive closed form solutions for the Bertrand-Nash equilibrium price.

Clark, Robert L.

TI Pensions, Bonding, and Lifetime Jobs. **AU** Allen, Steven G.; Clark, Robert L.; McDermed, Ann A.

Clements, Michael P.

PD September 1990. **TI** Empirical Analysis of Macroeconomic Time Series: VAR and Structural Models. **AU** Clements, Michael P.; Mizon, Grayham E. **AA** Clements: Institute of Economics and Statistics and Oxford University. Mizon: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9008; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 34. **PR** no charge. **JE** C22, C51, C52, E32. **KW** Time Series. VAR. Economic Fluctuations. Model Specification.

AB VAR and structural econometric models have complementary roles in the modeling of macroeconomic time series. A constant parameter VAR, provided it is statistically well specified, constitutes a valid basis for testing hypotheses of dynamic specification, exogeneity, and a priori structure, thus facilitating model evaluation, as well as suggesting a potentially efficient model development strategy. Deterministic (e.g. trends and regime shifts) and stochastic (e.g. integrated variables) nonstationarities are analyzable within this framework, and the Johansen maximum likelihood procedure for co-integrated systems is used in an analysis of the determination of earnings, prices, productivity, and unemployment in the U.K.

Cochrane, John H.

PD January 1991. **TI** Volatility Tests and Efficient Markets: A Review Essay. **AA** University of Chicago. **SR** National Bureau of Economic Research Working Paper: 3591; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$2.00. **JE** G14, E32. **KW** Discount Rate. Market Efficiency. Volatility. Business Cycles.

AB This essay examines what volatility tests tell us about the data and what implications we should derive from them. It argues that volatility tests do not tell us that "prices are too volatile", implying that "markets are inefficient", but rather that "(discounted) returns are forecastable", implying that "current discount rate models leave a residual". It also argues that the discount rate residuals documented by volatility tests (and equivalent return forecasting regressions or Euler equation tests) are suggestive of rational, business cycle-induced discount rate movements, rather than "fads" or other inefficiencies.

Codognato, Giulio

PD September 1990. **TI** Cournot, Cournot-Walras and Walras Equilibria in Exchange Economies: An Example. **AU** Codognato, Giulio; Gabszewicz, Jean J. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9047; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 18. **PR** not available. **JE** D51. **KW** Walrasian Equilibrium. Cournot Equilibrium. Exchange Economies.

AB We introduce the notion of Cournot-Walras equilibrium for a pure exchange economy. We first investigate, by means of an example, the relationship between the notion of Cournot equilibrium proposed by Shapley and Shubik and the Cournot-Walras equilibrium, and we show that they asymptotically coincide. Then we show, in the same example, that the Cournot-Walras equilibrium converges by replication to the Walras equilibrium. Finally, we provide a version of the example in the framework of a mixed model, embodying atoms and a continuum of traders. We show that, in this framework, the Cournot and the Cournot-Walras equilibria coincide.

Cohen, Daniel

PD November 1989. **TI** A Valuation Formula for LDC Debt. **AA** CEPREMAP and Universite de Nancy. **SR** CEPREMAP Discussion Paper: 9003; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 14. **PR** 20 F. **JE** H63, F34, O11. **KW** Developing Countries. Public Debt. Current Account.

AB The paper gives a valuation formula for LDC debt which is used for assessing: 1) What is the price at which a buyback of the debt is advantageous to the country (we shall see that it is likely to be half the observed market price)? 2) What is the value to the creditors of having the flows of payment guaranteed against the extrinsic stochastic disturbance faced by the country (we shall see that it may not exceed 25%)? 3) What is the trade-off between growth of payments and levels of payments (we show that a 1% additional growth rate is worth a 15% increase of the flows)?

PD November 1989. **TI** Slow Growth and Large LDC Debt in the Eighties: An Empirical Analysis. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9002; CEPREMAP, 142 rue du Chevaleret, 75013 Paris,

FRANCE. **PG** 47. **PR** 20 F. **JE** H63, E22, O41, O57. **KW** Economic Growth. Developing Countries. Public Debt. Business Investment.

AB This paper aims at disentangling the correlation between LDC debt and growth in the eighties. We show that large debt was not an unconditional predictor of slow growth in the eighties nor that investment was abnormally low, when compared to a "financial autarky" rate, calculated in the text. We do find, however, that the service of the debt crowded out investment. For the rescheduling countries we show that 1% of GDP paid abroad reduced domestic investment by 0.5% of GDP. This is shown to be consistent with the prediction of the theoretical model presented in the text.

PD May 1990. **TI** Which Rules Rather than Discretion: II - The Case of "Simple" Rules. **AU** Cohen, Daniel; Michel, Philippe. **AA** Cohen: CEPREMAP and Universite de Nancy - II. Michel: Universite Paris - I. **SR** CEPREMAP Discussion Paper: 9014; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 18. **PR** 20 F. **JE** D72, D71, D78. **KW** Credibility. Government Policy. Voting.

AB The dynamic inconsistency of a government's preferred policy, when it occurs, usually implies that the "maximum" level of welfare which can be delivered at some initial time can only be attained by constraining the economy to "low" levels in the future. In this paper, we set up a linear quadratic model in which we impose the "best" policy rule which is looked for today is subject to the constraint of always delivering in the future a given reservation level of welfare which-at equilibrium- is the level that the "best" policy itself offers to deliver. Drawing on a previous work, we argue that the solutions to this "Generalized Bellman Equation" are those that are likely to be adopted by a democracy in which voters are never bound by their previous choices.

PD May 1990. **TI** "Secret" Buy-Backs of LDC Debt. **AU** Cohen, Daniel; Verdier, Thierry. **AA** Cohen: CEPREMAP and CEPR. Verdier: DELTA. **SR** CEPREMAP Discussion Paper: 9018; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 17. **PR** 20 F. **JE** O16, H63, G21, E62. **KW** Developing Countries. Public Debt. Banking.

AB We analyze the buy-back of its debt by an LDC. Contrary to the analyses that were previously done on this subject, we assume that the debtor can hide its transactions behind the veil of a fictitious operator. The banks, we assume, cannot discriminate intra-bank transactions from buybacks by the debtor itself. With this assumption, the lenders set the price by (rationally) taking into account the country's incentive to repurchase its debt. Will the debtor undertake a buyback of its debt? The answer is a qualified yes. Large buy-backs will take place. With a continuum of debtors (whose cash constraints are not perfectly known to the banks), the rich debtors will attempt to repurchase as much of their debt as their cash constraint allows them to. This is shown to be Pareto improving (both the banks and the country like it).

PD January 1991. **TI** Slow Growth and Large LDC Debt in the Eighties: An Empirical Analysis. **AA** CEPREMAP, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 461; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** O11, O41, H32, E62, H63. **KW** Investment. Debt Service. Developing Countries. Public

Debt. Economic Growth.

AB This paper aims to disentangle the correlation between LDC debt and growth in the 1980s. We show that large debt was not an unconditional predictor of slow growth in the eighties and that investment was not abnormally low, when compared with a "financial autarky" rate, calculated in the text. We do find, however, that service of the debt crowded out investment. For the rescheduling countries we show that 1% of GDP paid abroad reduced domestic investment by 0.3% of GDP. This is shown to be consistent with the prediction of the theoretical model presented in the text, and identical to the correlation between investment and foreign finance observed in the 1960s.

PD March 1991. **TI** Which "Simple" Rules Rather than Discretion? **AU** Cohen, Daniel; Michel, Philippe. **AA** Cohen: CEPREMAP, France. Michel: Universite de Paris - I. **SR** Centre for Economic Policy Research Discussion Paper: 536; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** E61, E63. **KW** Government Policy. Policy Coordination. Social Welfare.

AB The dynamic inconsistency of a government's preferred policy, when it occurs, usually implies that the maximum level of welfare that can be delivered at some initial time can only be attained by constraining the economy to "low" levels in the future. In this paper, we set up a linear quadratic model in which the "best" policy rule which is looked for today is subject to the constraint of always delivering in the future a given reservation level of welfare which - in equilibrium - is the level that the "best" policy itself offers to deliver. We fully characterize the solutions to this problem in the cases when the government policies are constant, linear and kinked linear.

PD March 1991. **TI** The Solvency of Eastern Europe. **AA** CEPREMAP, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 539; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 35. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** O41, F34, O52. **KW** Europe. Endogenous Growth. Public Debt. Growth Model.

AB This paper applies the methodology and the empirical results derived from the "endogenous growth literature" to the East European countries. From that baseline, we analyze the solvency of Eastern Europe by calculating a "growth-adjusted-debt-per-effective-capita" measure of the burden of debt in these countries. Finally, we calculate a benchmark for the secondary market price of their debts.

PD April 1991. **TI** Which Rules Rather than Discretion in a Democracy? An Axiomatic Approach. **AU** Cohen, Daniel; Michel, Philippe. **AA** Cohen: CEPREMAP, Paris. Michel: Universite de Paris I. **SR** Centre for Economic Policy Research Discussion Paper: 537; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 25. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** D78, D72. **KW** Voting. Government Policy.

AB This paper sets a framework for analyzing how memoryless voters may come to elect and re-elect a committed policy-maker. Policy-makers, we assume, are trusted to implement the policy that they announce *ex ante* (and do implement it, if elected and re-elected). Voters, however, are

never bound by their previous votes. With no restrictions imposed on the *ex ante* announcements of the policy-makers, no commitment is, in general, feasible. (As we argue in the text, the Barro-Gordon framework is an exception.) What we show in the paper is how a (natural) set of axiomatic restrictions imposed on the set of policy announcements may yield an unambiguous stationary state towards which all policy announcements will converge.

Cole, Harold L.

PD March 1991. **TI** Reputation with Multiple Relationships: Reviving Reputation Models of Debt. **AU** Cole, Harold L.; Kehoe, Patrick J. **AA** Cole: Federal Reserve Bank of Minneapolis and University of Pennsylvania. Kehoe: University of Minnesota and Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 137; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 35. **PR** no charge. **JE** F34, F41. **KW** Reputation. International Debt. International Default. Debt Repayment. Sovereign Debt. Borrowing.

AB A traditional explanation for why sovereign governments repay debts is that they want to keep a good reputation so they can easily borrow more. Bulow and Rogoff have challenged this explanation. They argue that, in complete information models, government borrowing requires direct legal sanctions. We argue that, in incomplete information models with multiple trust relationships, large amounts of government borrowing can be supported by reputation alone.

Comanor, William S.

PD February 1991. **TI** Predatory Pricing and the Importance of Intent. **AU** Comanor, William S.; Frech, H. E., III. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 1-91; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. **PG** 22. **PR** no charge. **JE** K21. **KW** Predation. Predatory Pricing. Commitment. Antitrust.

AB In a recent decision of the U.S. Seventh Circuit Court of Appeals, Judge Frank Easterbrook argued, on grounds of judicial economy, that evidence on the intent of an alleged predator should be ignored in antitrust cases. We disagree, focusing on the game theoretic idea that a predator must communicate a reaction function (or commitment) to the current victims and to possible future entrants. This view narrows the search for evidence on intent and clarifies its interpretation. Therefore, we believe that evidence on intent, where available, should be considered in antitrust cases.

Constantinides, George M.

TI Habit Persistence and Durability in Aggregate Consumption: Empirical Tests. **AU** Ferson, Wayne E.; Constantinides, George M.

Corsetti, Giancarlo

PD December 1990. **TI** Exchange Rate Volatility in Integrating Capital Markets. **AU** Corsetti, Giancarlo; Grilli, Vittorio; Roubini, Nouriel. **AA** Corsetti and Roubini: Yale University. Grilli: Birkbeck College. **SR** National Bureau of Economic Research Working Paper: 3570; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** \$2.00. **JE** F31, F21.

KW Exchange Rate. Capital Mobility. Capital Controls.

AB This paper investigates the relationship between international capital liberalization and exchange rate volatility. While the effects of a capital controls liberalization on the transaction volume in the foreign exchange market are theoretically unambiguous, the effects on the volatility of the exchange rate can have either sign. On one hand, the liberalization leads to increasing economy wide and investor-specific uncertainty. On the other hand, the augmented number of participants in the market should reduce exchange rate fluctuations. The uncertainty effects should be dominant in the short-run, while the increase in the number of traders in the longer run should make the market thicker and tend to reduce volatility.

PD March 1991. **TI** Fiscal Deficits, Public Debt and Government Solvency: Evidence from OECD Countries. **AU** Corsetti, Giancarlo; Roubini, Nouriel. **AA** Yale University. **SR** National Bureau of Economic Research Working Paper: 3658; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** \$2.00. **JE** H61, H63, O57. **KW** Public Sector. Public Debt. Government Spending. Budget Constraint.

AB This paper discusses different empirical tests of public sector solvency and applies them to a sample of 18 OECD countries. Provided that the government solvency constraint need to be imposed, these tests develop from the idea of verifying whether the intertemporal budget constraint of the public sector would be satisfied a) had the fiscal and financial policy in the sample been pursued indefinitely and b) were the relevant macro and structural features of the economy stable over time. If solvency is not supported by the empirical evidence, a change either in the policy or on the relevant macro and structural variables (growth, inflation, interest rates, demographic factors) must occur at some point in the future.

Crabe, Leland Edward

PD March 1991. **TI** Callable Corporate Bonds: A Vanishing Breed. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 155; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 33. **PR** no charge. **JE** G31, G32, G12. **KW** Corporate Bond. Call Option. Capital Markets. Corporate Investment.

AB An examination of 3999 straight bonds issued with investment-grade ratings by U.S. corporations between 1977 and 1990 shows that the number of new offerings with call provisions has declined sharply, while the market valuation of embedded call options has increased.

Crafts, N. F. R.

PD 1991. **TI** Productivity Performance in the U.K. in Historical and International Perspective. **AA** University of Warwick. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9103; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 38. **PR** no charge. **JE** E32, O52. **KW** England. Economic Growth. Economic Fluctuations.

AB For most of the postwar period the British economy experienced a relative economic decline. Although growth and productivity were higher than at any time previously in the quarter century before OPEC I, other western countries far

outperformed the U.K. with the result that by the 1960s slow British growth had been overtaken in terms of GDP per person by much of the OECD. The late 1970s saw an apparent intensification of relative decline and on all major macroeconomic indicators (growth, inflation, unemployment) performance deteriorated culminating in the traumatic stagflationary recession of 1979-81.

Crettez, Bertrand

PD September 1990. **TI** Economically Rational Expectations Equilibrium. **AU** Crettez, Bertrand; Michel, Philippe. **AA** Crettez: Universite de Paris I. Michel: Universite de Paris I and Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9055; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 13. **PR** not available. **JE** D84. **KW** Expectations. Rational Expectations. Dynamic Model.

AB Introducing costs of expectations formation in economic analysis may have strong implications. Rational expectations are not economically rational expectations when the cost exceeds the benefit. We introduce the concept of an economically rational expectations equilibrium, i.e. an equilibrium in which no agent regrets the expectations choices he made. We study the properties of this equilibrium both in a static and dynamic framework. When agents form either rational expectations or adaptive expectations, the sequence of economically rational expectations equilibria converges to the rational expectations equilibrium, but simultaneously all agents will have adaptive expectations.

d'Aspremont, Claude

PD April 1990. **TI** Imperfect Competition, Rational Expectations and Unemployment. **AU** d'Aspremont, Claude; Ferreira, R. Dos Santos; Gerard-Varet, L. A. **AA** d'Aspremont: Universite Catholique de Louvain. Ferreira: Universite Louis Pasteur. Gerard-Varet: Ecole des Hautes Etudes en Sciences Sociales, France. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9044; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 31. **PR** not available. **JE** D43, J64, J23, D92. **KW** Unemployment. Imperfect Competition. Overlapping Generations Model. Oligopoly.

AB Examples of overlapping generation economies are given where unemployment arises in all perfect foresight equilibria, whatever the (exogenous) sequence of money wages, because of imperfect competition prevailing in the output market. Whether inflationary (with unemployment converging to zero) or not (with, at best, full employment alternating with unemployment), such equilibria can be ascribed to high intertemporal or intersectoral complementarity and a small number of firms either in a Cournot oligopoly or in monopolistic competition.

PD August 1990. **TI** Invariance, Neutrality and Weakly Continuous Expected Utility. **AU** d'Aspremont, Claude; Gevers, Louis. **AA** d'Aspremont: Universite Catholique de Louvain. Gevers: Universite Catholique de Louvain and Facultes Universitaires Notre-Dame de la Paix. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9046; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 23. **PR** not available. **JE** D81. **KW** Decision

Theory. Uncertainty. Expected Utility Theory.

AB This paper is concerned with preference orderings among decisions under uncertainty and their utility representations. Our approach is axiomatic and we attempt to bridge the gap between measurement theory and a weakly continuous version of expected utility: by this, we mean that different values of our expected utility indicator unambiguously imply strict preference, whereas two decisions under uncertainty having the same value are not necessarily indifferent. We rely on several versions of the invariance and neutrality axioms that are familiar in social choice theory and we hope that their meaning is even more transparent in a context where interpersonal utility comparisons are excluded. The preference orderings that we characterize are all separable (they meet the sure thing principle) and the relevance of our work for positive economics may be criticized on this ground.

PD October 1990. **TI** Credible Entry-Deterrence by Delegation. **AU** d'Aspremont, Claude; Michel, Philippe. **AA** d'Aspremont: Universite Catholique de Louvain. Michel: Universite de Paris I. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9056; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 16. **PR** not available. **JE** L11, L16, L13, D21, D43. **KW** Free Entry. Industrial Organization. Market Structure. Differentiated Products.

AB In a two-stage model, one for investment and one for production, we show that market preemption is not credible as a strategy to deter entry, whenever the established firm product and the potential entrant product are close substitutes. However, if the established firm delegates production decisions to competing manners while keeping investment centralized, entry can be credibly deterred even for undifferentiated products.

Dagsvik, John

PD January 1991. **TI** Was the Great Depression a Low-Level Equilibrium? **AU** Dagsvik, John; Jovanovic, Boyan. **AA** Dagsvik: Central Bureau of Statistics, Norway. Jovanovic: New York University. **SR** New York University Economic Research Reports: 91-07; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 31. **PR** no charge. **JE** E32, N12. **KW** Fluctuations. Great Depression. Business Cycle.

AB Was the Great Depression the result of a massive coordination failure? Or was it the manifestation of a unique equilibrium response to adverse shocks? More generally, do aggregates fluctuate partly because agents occasionally settle on inferior, low-level equilibria? These questions lie at the heart of the current disagreement over how one should view business cycles. This paper estimates a Phillips-curve employment model with monetary and real shocks. In one region of the parameter-space the model yields uniqueness, while in the other it yields up to three equilibria. When more than one equilibria exists, a selection rule is needed. The equilibrium selection rule that we use has a Markovian structure, but the money supply is denied a coordination role -- it can not affect the choice of the equilibrium point. The global maximum likelihood estimates lie in the uniqueness region, implying that instead of being a low-level, coordination failure equilibrium, the Depression era was caused by movements in fundamentals only.

Danthine, Jean-Pierre

PD October 1990. **TI** Risk Sharing, the Minimum Wage and the Business Cycle. **AU** Danthine, Jean-Pierre; Donaldson, John B. **AA** Danthine: Universite de Lausanne. Donaldson: Columbia University. **SR** Universite de Lausanne Cahiers de Recherches Economiques: 9018; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne BFSH - Dorigny, CH-1015 Lausanne/SWITZERLAND. **PG** 30. **PR** no charge. **JE** E32, E24, D81. **KW** Business Cycle. Risk Sharing. Employment. Labor Market.

AB This paper constructs a dynamic general equilibrium model in which labor incomes are influenced by risk sharing considerations and borrowing restrictions. We show that the dynamic properties of such an economy, in which the sharing of income and risk is effected solely via the labor market, are consistent with the principal stylized facts of the business cycle. We argue that these non-Walrasian modeling features can provide a natural resolution to the employment variability paradox. We also demonstrate the computational feasibility of extending the real business cycle methodology to accommodate non Pareto optimal equilibria.

Dasgupta, Partha

PD August 1990. **TI** On the Measurement of Well-Being. **AU** Dasgupta, Partha; Weale, Martin. **AA** Dasgupta: Stanford University and University of Cambridge. Weale: University of Cambridge and Clare College. **SR** University of Cambridge DAE Working Paper: 9018; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 29. **PR** \$4.00 (2.00 pounds) checks payable to University of Cambridge. **JE** I31, D63, D11. **KW** Socioeconomic Indicators. Civil Liberties. Well-Being. Developing Countries.

AB It is widely recognized that per capita income is not a universal indicator of well-being. A range of socioeconomic indicators is frequently used to assess country performance. We argue that due regard should also be paid to political and civil liberties and construct a welfare ranking of the poorer developing countries, which takes account of these in addition to the more usual indicators. We then compare improvements in socioeconomic performance with the availability of political and civil liberties and observe that improvements in per capita income, life expectancy and infant mortality are positively correlated with the availability of political and civil rights while improvements in literacy are negatively correlated with these rights.

Dastoor, Naorayex K.

PD June 1988. **TI** Some Power Comparisons of Joint and Paired Tests for Non-Nested Models under Local Hypotheses. **AU** Dastoor, Naorayex K.; McAleer, Michael. **AA** Dastoor: University of Alberta. McAleer: Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 168; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 18. **PR** no charge. **JE** C12, C52. **KW** Asymptotic Theory. Hypothesis Testing. Wald Test.

AB This paper compares the asymptotic local power properties of some tests of a null model against a single non-nested alternative and against multiple non-nested alternatives,

denoted hereafter as paired and joint tests, respectively. It is demonstrated that the ranking of tests on the basis of asymptotic local powers depends on the choice of local hypothesis. When a local null hypothesis is employed, it is not possible to rank the Wald and Cox-type paired or joint tests. However, when the local hypothesis is specified with reference to one of the alternative models under consideration, a ranking of different test procedures becomes possible. Under a local alternative hypothesis, it is shown that the paired Wald test will never have greater asymptotic local power than a paired Cox-type test.

Davies, Hugh

PD September 1990. **TI** The Foregone Earnings of Europe's Mothers. **AU** Davies, Hugh; Joshi, Heather. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 24/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 40. **PR** no charge. **JE** J13, J11, O57, J22. **KW** Opportunity Costs. Childbearing. Child Care. Labor Supply. Wages. Fertility.

AB The earnings foregone over a lifetime by a woman bearing one, two or three children compared to what she would have earned with none are simulated for four European countries, on the basis of a variety of econometrically estimated parameters for participation, hours and wage functions. Among the countries, Britain and West Germany turn out to resemble each other, with higher costs than France and Sweden. Swedish costs are due largely to reductions in hours, and in France they rise markedly for the third child or for groups with low labor force attachment. The implications of the results for the explanation of low fertility are discussed.

de Melo, Martha

TI Government Revenue from Financial Repression. **AU** Giovannini, Alberto; de Melo, Martha.

TI Government Revenue from Financial Repression. **AU** Giovannini, Alberto; de Melo, Martha.

Dekle, Robert

PD April 1991. **TI** Japan's High Saving Rate Reaffirmed. **AU** Dekle, Robert; Summers, Lawrence. **AA** Dekle: Boston University. Summers: The World Bank. **SR** National Bureau of Economic Research Working Paper: 3690; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 11. **PR** \$2.00. **JE** C82, E21, D31. **KW** Savings. Income Accounts. National Income Accounting.

AB Compared to the U.S. national accounts, the Japanese accounts understate consumption and government spending, and therefore overstate the national saving rate. Recently, Hayashi has recalculated Japan's national saving according to the American Department of Commerce definition and found that from the mid-1970s until today, Japan's national saving rate is nearly halved. In this paper, we argue that Hayashi's adjustments to the Japanese income accounts are exaggerated, and present measures of Japanese and U.S. private saving that are immune from national income accounting biases. Our saving measures are constructed from the balance sheets of the household sectors in the United States and Japan. Far from being equal, we find that the two country gap in saving rates in the early 1980s has averaged between 15 and 30 percentage points, depending on the measure.

Delgado, Francisco

PD January 1991. **TI** Target Zones Big and Small. **AU** Delgado, Francisco; Dumas, Bernard. **AA** Delgado: Duke University. Dumas: HEC School of Management, France. **SR** National Bureau of Economic Research Working Paper: 3601; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$2.00. **JE** F33, E42, E52. **KW** European Monetary System. Monetary Regime. Interest Rate. Exchange Rate.

AB Under different assumptions about the underlying monetary shocks, we study target zones of various widths and the effect they have on variables like the interest differential. The stochastic disturbances assumed are successively a non-zero mean random walk and a mean reverting process. The latter is used to incorporate the "leaning against the wind" policy (intramarginal intervention) which is prevalent in the EMS.

Dewatripont, Mathias

PD April 1991. **TI** The Virtues of Gradualism and Legitimacy in the Transition to a Market Economy. **AU** Dewatripont, Mathias; Roland, Gerard. **AA** Universite Libre de Bruxelles. **SR** Centre for Economic Policy Research Discussion Paper: 538; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 14. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** O21, O15, P52. **KW** Europe. Economic Reform. Government Policy.

AB This paper presents a simplified model of sectoral restructuring in Eastern Europe. A move towards allocative efficiency is desired by the reform-minded government, but the shift to higher productivity which such efficiency requires would lead to massive layoffs and labor reallocation in the transition period. We look at the impact of political constraints (unanimity and/or majority worker approval) on reform proposals when the government faces a heterogeneous workforce, holding private information on relative outside opportunities. When the budgetary consequences of exit compensations are so important as to make partial reforms preferable to full reforms, gradualism emerges as the optimum in a dynamic context without government commitment. It is also shown that under democratic majority rule, a government in control of the agenda of reforms can win majority approval for plans which end up hurting majority interests intertemporally by threatening to switch majorities in future reform proposals.

Disney, Richard

PD October 1990. **TI** The Effect of Union Membership on Occupational Pension Coverage in Britain: A Disaggregated Analysis. **AU** Disney, Richard; Cameron, Lisa. **AA** Disney: University of Kent and Institute for Fiscal Studies. Cameron: Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/16; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, ENGLAND. **PG** 24. **PR** 3 pounds. **JE** J32, J33, J51. **KW** Unions. Fringe Benefits. Pensions. Wages.

AB The paper examines the effect of union membership on probability of receiving fringe benefits; notably of occupational pension coverage. It finds that union status raises the probability of occupational pension coverage by between 8 and 35 percentage points for various groups, with the strongest effect among manual men. Family Expenditure Survey (FES)

data are used in the analysis. Union membership coverage is lower than in other surveys, but the distribution by characteristics is similar. The relation between wage levels, union status, and provision of a range of other fringe benefits is also examined in the study.

Diwan, Ishac

PD January 1991. **TI** Are Buy-Backs Back? Menu-Driven Debt-Reduction Schemes with Heterogeneous Creditors. **AU** Diwan, Ishac; Spiegel, Mark M. **AA** Diwan: The World Bank. Spiegel: New York University. **SR** New York University Economic Research Reports: 91-05; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 40. **PR** no charge. **JE** F34. **KW** Debt Reduction. Deposit Insurance. Buybacks. Debtor Nations.

AB We analyze the mechanics of menu-driven debt reduction deals initiated by debtor countries in the presence of heterogeneity between their group of creditors. We describe the resulting equilibrium of deals where banks can choose freely between exit and relending options. The extent of exit is shown to depend in equilibrium on the terms of the menu, banks' characteristics and on the sensitivity of the creditworthiness of the debtor to debt reduction. We also contrast market buybacks with menu-driven debt reduction and argue that the latter is a more flexible mechanism that can lead to debt reduction at the "marginal" value of debt, rather than at its average value.

Dolado, Juan

PD January 1991. **TI** Macroeconomic Policy, External Targets and Constraints: The Case of Spain. **AU** Dolado, Juan; Vinals, Jose. **AA** Banco de Espana, Madrid. **SR** Centre for Economic Policy Research Discussion Paper: 505; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 42. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F32, E63, O52. **KW** Current Account. Capital Controls. Macroeconomic Policy. Spain.

AB This paper argues that in the presence of distortions and market imperfections it may be rational for governments to monitor short-run fluctuations of the external account in order to anticipate and therefore avoid difficulties, even though the true external constraint is binding only in the long-run. This seems to have been the case in Spain, where macroeconomic policy over the last 20 years has seen a number of clear changes following unfavorable developments in the external accounts. The results of various solvency tests indicate that, in spite of the recent worsening of the current account, the Spanish economy is currently more than complying with its external constraint. However, we warn against complacency in view of the removal of capital controls in the run-up to 1992.

Dolton, Peter J.

PD October 1990. **TI** Occupational Access and Wage Discrimination. **AU** Dolton, Peter J.; Kidd, Michael P. **AA** Dolton: University of Newcastle-Upon-Tyne. Kidd: University of Tasmania. **SR** Queen's Institute for Economic Research Discussion Paper: 803; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 32. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** J24, J31. **KW** Occupational Segregation. Wage Differentials. Discrimination. Occupational Choice. Wages.

AB It is well known that the occupational distribution for

males and females differ significantly in Britain. The implications of this difference are explored in a joint model of earnings and occupation choice. The role and relative importance of inter- and intra-occupational effects are evaluated as contributors to the male/female wage differential. The model explicitly incorporates the endogeneity of occupation choice and examines the role of sample selection in occupation specific wage equations. The main conclusions following from the econometric results are that the role of inter-occupation gender wage differences dwarf that of intra-occupation differences.

Dominguez, Kathryn M.

PD April 1991. **TI** Do Exchange Rate Auctions Work? An Examination of the Bolivian Experience. **AA** Princeton University. **SR** National Bureau of Economic Research Working Paper: 3683; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** \$2.00. **JE** O54, F31, E58. **KW** Bolivia. Exchange Rates. Auctions. Central Bank.

AB The Bolivian experience suggests that, even in highly indexed economies, exchange rate auctions can work. After introduction of its auction, the Bolsin, not only did the parallel market premium for dollars all but disappear in Bolivia, but the Boliviano exchange rate remained surprisingly stable. This paper examines how the Bolsin accomplished this. The empirical evidence from daily auction data suggests that credit for the Bolsin's success should be attributed largely to central bank policy at the auction rather than the auction as an institution.

PD April 1991. **TI** On the Need to Allow for the Possibility that Governments Mean What They Say: Interpreting the Target-Zone Model of Exchange-Rate Behavior in the Light of EMS Experience. **AU** Dominguez, Kathryn M.; Kenen, Peter B. **AA** Princeton University. **SR** National Bureau of Economic Research Working Paper: 3670; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$2.00. **JE** F31, E42, E52, F33. **KW** Exchange Rate. Monetary Policy. European Monetary System.

AB Empirical work on exchange rate behavior under a target zone regime has used data produced by the European Monetary System (EMS) and has found that the data contradict important predictions made by the standard target zone model. We argue that the contradictions reflect a misinterpretation of policies pursued by the EMS countries. They intervened intramarginally, to keep exchange rates well within the target zone, rather than intervening at the edges of the zone to prevent rates from crossing them. In the Basle-Nyborg Agreement of 1987, however, the EMS countries agreed to make fuller use of the band, and the effects of the agreement show up strongly in the data. Exchange rates behave differently after the agreement than they did before. The effect appears clearly in the behavior of the French franc and less decisively in the behavior of the Italian lira. The paper concludes by examining and rejecting alternative explanations for the observed differences in exchange rate behavior.

Donaldson, John B.

TI Risk Sharing, the Minimum Wage and the Business Cycle. **AU** Danthine, Jean-Pierre; Donaldson, John B.

Dow, James

PD April 1991. **TI** Trading, Communication and the Response of Price to New Information. **AU** Dow, James; Gorton, Gary. **AA** Dow: London Business School. Gorton: University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 3687; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** \$2.00. **JE** G12, G14. **KW** Prices. Information. Securities.

AB The dynamic behavior of security prices is studied in a setting where two agents trade strategically and learn over time from market prices. The model introduces an information structure which is intended to capture the notion that information is difficult to interpret. Strategic interaction and the complexity of the information result in a protracted price response. Indeed, equilibrium price paths of the model may display reversals in which the two traders rationally revise their beliefs, first in one direction, and then in the opposite direction, even though no new information has entered the system. A piece of information which is initially thought to be bad news may be revealed, through trading, to be good news.

Dreze, Jacques H.

PD July 1990. **TI** Europe's Employment Problem: A Synthesis. **AU** Dreze, Jacques H.; Bean, Charles R. **AA** Dreze: Universite Catholique de Louvain. Bean: London School of Economics. **SR** Universite Catholique de Louvain **CORE** Discussion Paper: 9041; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 42. **PR** not available. **JE** E32, E24, E23, O57. **KW** Unemployment. Europe. Economic Fluctuations.

AB This paper is a synthesis of the research carried out within the European Unemployment Programme. It presents a detailed description of the single theoretical model adopted by the ten different countries taking part in the program, in order to examine the relationship between key economic variables and identify the sources of the problem of persistent and steadily increasing unemployment. It also reports on empirical results obtained by the participants, highlighting aspects, such as wages, prices, and productivity, where national comparisons are interesting, as well as aspects which are more specific to the common model, such as output, employment, and demand. A summary of broad empirical regularities, emanating from the EUP is then followed by some policy recommendations.

Dreze, Jacques H.

PD November 1990. **TI** Risk-Sharing on the Labour Market and Second-Best Wage Rigidities. **AU** Dreze, Jacques H.; Gollier, Christian. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain **CORE** Discussion Paper: 9067; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 35. **PR** not available. **JE** J41, J21. **KW** Unemployment. Wage Contracts. Wages.

AB The starting point of the analysis is that a significant proportion of the labor force is not covered by efficient labor contracts. In particular, the non-existence of forward labor contracts limits the opportunity of efficient risk-sharing through private arrangements among young labor-suppliers and capital-owners. In such a context, state-dependent labor taxes and employment subsidies would be required to achieve ex ante Pareto efficiency. In the absence of employment subsidies, a

certain (limited) degree of downward wage rigidity is in general Pareto superior to full wage flexibility. At the second-best optimum so defined, productive efficiency is sacrificed in some states, in order to achieve greater efficiency in risk-sharing. Thus, the unemployment associated with wage rigidity is inefficient, though voluntary due to the levels of benefits. A limited degree of wage discrimination by hiring date is typically part of the second-best policy.

Dubin, Jeffrey A.

PD December 1989. **TI** The Effect of Audit Rates on Federal Income Tax Filings and Collections, 1977-1986. **AU** Dubin, Jeffrey A.; Graetz, Michael A.; Wilde, Louis L. **AA** Dubin and Wilde: California Institute of Technology. Graetz: Yale University. **SR** Caltech Social Science Working Paper: 711; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 19. **PR** no charge. **JE** H26, H21. **KW** Tax Audit. Tax Evasion. Tax Compliance. Tax System.

AB This paper analyzes the effects of audit rates and certain other factors on federal income tax filings and collections. Using data drawn primarily from the Annual reports of the Commissioner of Internal Revenue for the years 1977-1986, we investigate the overall performance of the federal revenue collection process and estimate that total IRS collections in 1986 would have risen by approximately forty billion dollars had the federal audit remained constant at its 1977 level during the intervening period.

Duffee, Gregory R.

PD March 1991. **TI** A New Test for Mean Reversion in Stock Prices. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 152; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 35. **PR** no charge. **JE** G11, G12, G14. **KW** Stock Returns. Heteroskedasticity. Stock Market. Asset Pricing. Stock Prices.

AB If stock prices include both permanent (fundamental) and transitory (noise) components, the proportion of noise in a month's return depends on the variances of the innovations in these two components. If there are observable variables that are correlated with the size of a month's transitory-shock variance relative to the size of its permanent-shock variance, the fraction of the month's return that is reversed in the future will vary with these observable variables. This paper tests for such variation using postwar aggregate excess stock returns. It finds that both changes in monthly trading volume and predictable variations in monthly return volatility (measured in two different ways) are strongly positively associated with the proportion of noise in a month's return. If, in a given month, one of these variables is a standard deviation higher than its mean, on average an additional twenty percent of that month's return is reversed within one to three years.

Dumas, Bernard

TI Target Zones Big and Small. **AU** Delgado, Francisco; Dumas, Bernard.

Dunne, Paul

TI Measuring the Peace Dividend in the United Kingdom. **AU** Barker, Terry; Dunne, Paul; Smith, Ron.

Durlauf, Steven N.

PD February 1991. **TI** Multiple Equilibria and Persistence in Aggregate Fluctuations. **AA** Stanford University. **SR** National Bureau of Economic Research Working Paper: 3629; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 11. **PR** \$2.00. **JE** E32, D52, E23, D21, D24. **KW** Incomplete Markets. Business Fluctuations. Production. Productivity.

AB This paper explores the impact of incomplete markets and strong complementarities on the time series properties of aggregate activity. We consider an economy which consists of a large number of industries whose production functions both are nonconvex and exhibit localized technological complementarities. The productivity of each industry at t is determined by the production decisions of technologically similar industries at $t - 1$. No markets exist to coordinate production decisions. This feature implies that aggregate output dynamics for the model are quite different from those predicted by the associated Arrow-Debreu economy.

Dutta, J.

PD September 1990. **TI** Testing for Heterogeneous Parameters in Least Squares Approximations. **AU** Dutta, J.; Leon, H. L. **AA** Dutta: Columbia University. Leon: State University of New York. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9069; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 28. **PR** not available. **JE** C12, C21, C51. **KW** Ordinary Least Squares. Linear Regression Model. Hypothesis Testing.

AB This paper suggests tests for the heterogeneity of parameters in linear least squares estimation. The tests are based on the properties of resampled estimates, and test the hypotheses that the parameters have a common mean, or that they are independently and identically distributed. The tests can be viewed as the analogue of those based on recursive residuals, in cross-sectional models. We analyze the properties of tests based on jackknifed estimates in the linear regression model, and compare their performance in a small empirical application.

Eckstein, Zvi

PD February 1991. **TI** Seigniorage and the Welfare Cost of Inflation: Evidence from an Intertemporal Model of Money and Consumption. **AU** Eckstein, Zvi; Leiderman, Leonardo. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 7-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 30. **PR** no charge. **JE** E31, E13, E63, E41. **KW** Inflation. Budget Deficits. Seigniorage. Money Demand. Monetary Model.

AB This paper empirically investigates the restrictions embodied in a popular dynamic monetary model for the cross relations between consumption, money holdings, inflation and assets' returns using quarterly data for the high inflation economy in Israel, 1970-1988. The model considered includes money in agents' utility function. A set of the estimated parameters is used in the analysis to assess the model's quantitative implications for seigniorage and for the welfare costs of inflation. The estimates are found to account well for the observed stability over time of seigniorage in Israel and imply sizable welfare costs of inflation.

Eden, Benjamin

PD May 1991. **TI** Productivity, Market Power and Capacity Utilization when Spot Markets are Complete. **AU** Eden, Benjamin; Griliches, Zvi. **AA** Eden: University of Iowa and Technion-Israel Institute of Technology. Griliches: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3697; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$2.00. **JE** D24, L11, L60. **KW** Market Structure. Capacity Utilization. Monopoly. Risk Aversion.

AB Our test of price taking behavior looks at the choice of capacity rather than the choice of output. It is motivated by a complete spot markets model in which goods are distinguished by the selling probabilities in addition to other characteristics. When output is explained by total man-hours and a capacity utilization proxy, the coefficient of the first variable is the elasticity of capacity with respect to fixed labor. Under competition and risk neutrality this coefficient is equal to an average labor share. We use this observation to interpret Abbot-Griliches-Hausman's regressions and to argue that once the capacity utilization proxy is included in the regression, Hall's data at the manufacturing level fail to reject the joint hypothesis of competition and risk neutrality.

Edwards, J. S. S.

PD January 1991. **TI** Banks, Finance and Investment in West Germany since 1970. **AU** Edwards, J. S. S.; Fischer, Klaus. **AA** Edwards: University of Cambridge. Fischer: Universitat Bonn. **SR** Centre for Economic Policy Research Discussion Paper: 497; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 48. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** G31, G32, G34, G21, O52. **KW** Business Investment. Credit. Germany. Board of Directors. Banks.

AB The paper addresses the following questions. Does bank lending comprise a relatively large amount of finance for investment in Germany, and, if so, is this a consequence of bank representation on companies' supervisory boards (which, it is argued, reduces information asymmetries)? How strong is the degree of control of equity voting rights exerted by banks? To what extent does bank representation on supervisory boards constrain managements in such a way that internal efficiency is ensured? The analysis of this paper for the period 1970-85 casts some doubt on the argument that German banks are an important factor in good German economic performance.

Efraim, Sadka

TI Basic Concepts of International Taxation. **AU** Frenkel, Jacob A.; Razin, Assaf; Efraim, Sadka.

Eichenbaum, Martin

TI Labor Hoarding and the Business Cycle. **AU** Burnside, Craig; Eichenbaum, Martin; Rebelo, Sergio.

TI The Permanent Income Hypothesis Revisited. **AU** Christiano, Lawrence J.; Eichenbaum, Martin; Marshall, David.

Eichengreen, Barry

PD January 1991. **TI** Is Europe an Optimum Currency Area? **AA** University of California, Berkeley.

SR National Bureau of Economic Research Working Paper: 3579; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** \$2.00. **JE** F31, F22, F21. **KW** Currency. Labor Mobility. Exchange Rate. Capital Flows.

AB An optimum currency area is an economic unit composed of regions affected symmetrically by disturbances and between which labor and other factors of production flow freely. The symmetrical nature of disturbances and the high degree of factor mobility make it optimal to forsake nominal exchange rate changes as an instrument of adjustment and to reap the reduction in transactions costs associated with a common currency. This paper assesses labor mobility and the incidence of shocks in Europe by comparing them with comparable measures for Canada and the United States. Real exchange rates, a standard measure of the extent of asymmetrical disturbances, remain considerably more variable in Europe than within the United States.

El-Gamal, Mahmoud A.

PD August 1989. **TI** Bayesian Economists ... Bayesian Agents I: An Alternative Approach to Optimal Learning. **AU** El-Gamal, Mahmoud A.; Sundaram, Rangarajan K. **AA** El-Gamal: California Institute of Technology. Sundaram: University of Rochester. **SR** Caltech Social Science Working Paper: 705; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 35. **PR** no charge. **JE** D81, D83. **KW** Learning. Rational Expectations. Decision Theory. Uncertainty.

AB We study the framework of optimal decision-making under uncertainty where the agents do not know the full structure of the model and try to learn it optimally. We generalize the results on Bayesian learning based on the martingale convergence theorem to the sequential framework instead of the repeated framework for which results are currently available. We also show that the variability introduced by the sequential framework is sufficient under very mild identifiability conditions to circumvent the incomplete learning results that characterize the literature. We then question the type of convergence so achieved, and give an alternative Bayesian approach whereby we let the economist himself be a Bayesian with a prior on the priors that his agents may have. We prove that such an economist cannot justify endowing all his agents with the same (much less the true) prior on the basis that the model has been running long enough that we can almost surely approximate any agent's beliefs by any other's.

Engle, Robert F.

TI Measuring Risk Aversion from Excess Returns on a Stock Index. **AU** Chou, Ray; Engle, Robert F.; Kane, Alex.

PD April 1991. **TI** Measuring and Testing the Impact of News on Volatility. **AU** Engle, Robert F.; Ng, Victor K. **AA** Engle: University of California, San Diego. Ng: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 3681; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$2.00. **JE** G14, G13, G12. **KW** Information. Volatility. Stock Market. ARCH. Japan.

AB This paper introduces the News Impact Curve to measure how new information is incorporated into volatility estimates. A variety of new and existing ARCH models are compared and

estimated with daily Japanese stock return data to determine the shape of the News Impact Curve. New diagnostic tests are presented which emphasize the asymmetry of the volatility response to news. A partially nonparametric ARCH model is introduced to allow the data to estimate this shape. A comparison of this model with the existing models suggests that the best models are one by Glosten Jaganathan and Runkle and Nelson's EGARCH. Similar results hold on a pre-crash sample period but are less strong.

PD April 1991. **TI** Time-Varying Volatility and the Dynamic Behavior of the Term Structure. **AU** Engle, Robert F.; Ng, Victor K. **AA** Engle: University of California, San Diego. Ng: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 3682; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** \$2.00. **JE** G13, G14, G10. **KW** Yield Curve. Treasury Bill. Futures Market. Spot Rates.

AB In this paper, we consider a framework with which the cross-sectional and time series behavior of the yield curve can be studied simultaneously. We examine the relationship between the yield curve and the time-varying conditional volatility of the Treasury bill market. We demonstrate that differently shaped yield curves can result given different combinations of volatility and expectations about future spot rates. Moreover, adjusting the forward rate for the volatility related liquidity premium can improve its performance as a predictor of future spot rates at least for the period from August 1964 to August 1979.

Erzan, Refik

TI Rent Sharing in the Multi-Fibre Arrangement: Theory and Evidence from U.S. Apparel Imports from Hong Kong. **AU** Krishna, Kala; Erzan, Refik; Tan, Ling Hui.

Espinoza, Maria Paz

TI Dynamic Duopoly with Learning through Market Experimentation. **AU** Aghion, Philippe; Espinoza, Maria Paz; Jullien, Bruno.

Estrin, S.

TI Labor Managed vs. Private Firms: An Empirical Comparison of Cooperatives and Private Firms in Central Italy. **AU** Bartlett, W.; Cable, J.; Estrin, S.; Jones, D.; Smith, S.

Faini, Riccardo

PD January 1991. **TI** The Quality of Production of Textiles and Clothing and the Completion of the Internal Market. **AU** Faini, Riccardo; Heimler, Alberto. **AA** Faini: Universita de Brescia. Heimler: Centro Studi Confindustria, Italy. **SR** Centre for Economic Policy Research Discussion Paper: 508; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F13, F11, L67, L15, O52. **KW** Textiles. Product Quality. Developing Countries. Protectionism. Imports.

AB We evaluate the quality differentials between developing and developed countries' textiles and clothing exports. Theoretical analyses often conclude that protection leads to quality upgrading (downgrading) of imports (domestic production), while recent empirical work suggests that it shifts the quality of foreign and domestic goods in the same direction.

Using a simple duopoly model, in which average production costs decline more rapidly (or increase less sharply) for higher quality goods, we find that protection enables domestic producers to increase their share of the higher quality market segment. We compute multilateral Fisher Ideal price and quality indices for imports into the four major EC countries and find that quality differences explain about half the differences among the unit values of exporters to each market.

Feenstra, Robert C.

PD February 1991. **TI** Exchange Rate Volatility and International Prices. **AU** Feenstra, Robert C.; Kendall, Jon D. **AA** Feenstra: University of California at Davis. Kendall: University of Tasmania, Australia. **SR** University of California at Davis Economics Department Working Paper: 377; Department of Economics, University of California at Davis, Davis, California 95616-8578. **PG** 38. **PR** no charge. **JE** F31, F14, F41, G15. **KW** Pass-Through. Exchange Rate. Foreign Exchange. Exports. Imports.

AB We examine how exchange rate volatility affects exporter's pricing decision in the presence of optimal forward covering. By taking account of forward covering, we are able to derive an expression for the risk premium in the foreign exchange market, which is then estimated as a generalized ARCH model to obtain the time-dependent variance of the exchange rate. Our theory implied a connection between the estimated risk premium equation, and the influence of exchange rate volatility on export prices. In particular, we argue that if there is no risk premium, then exchange rate variance can only have a negative impact on export prices. In the presence of risk premium, however, the effect of exchange rate variance on export prices is ambiguous, and may be statistically insignificant with aggregate data. These results are supported using data on aggregate U.S. imports and exchange rates of the dollar against the pound, yen and mark.

PD February 1991. **TI** New Goods and Index Numbers: U.S. Import Prices. **AA** University of California, Davis. **SR** National Bureau of Economic Research Working Paper: 3610; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** C43, F14. **KW** Prices. Price Index. Imports.

AB Researchers constructing index numbers frequently face the problem of new (or disappearing) goods, for which the price and quantity are not available in some periods. In theory, the correct way to handle a new good is to treat its price before it appears as equal to the reservation price (i.e., where demand is zero); in practice, this method can be difficult to implement. However, if the underlying aggregator function is CES then the reservation price is infinity, and we show that the corresponding price index takes on a very sensible form. We apply this formula to measure the price index for six disaggregate U.S. imports, which have been supplied from many new countries over the past several decades. We find that by incorporating the new supplying countries, the price index for developing countries is significantly lower than would otherwise be measured.

PD March 1991. **TI** Accounting for Growth with New Inputs. **AU** Feenstra, Robert C.; Markusen, James R. **AA** Feenstra: University of California at Davis. Markusen: University of Colorado, Boulder. **SR** University of California at Davis Economics Department Working Paper:

380; Department of Economics, University of California at Davis, Davis, California 95616-8578. **PG** 27. **PR** no charge. **JE** E23, D24, E27, D43. **KW** Factor Productivity. Monopolistic Competition. Growth Model. Output.

AB Estimates of the sources of growth generally produce large residuals and significant time trends that are interpreted as "technical change". The recent dynamic monopolistic competition models suggest that these results may result from the endogenous creation of new intermediate inputs over time. This paper derives and analyzes a single-period GNP function for such an economy. This function exhibits constant returns to scale in the primary inputs, and is increasing in the range of intermediate inputs. Using a specific example, we simulate an artificial data set and illustrate how biased regressions results and strong time trends can arise in growth accounting.

PD March 1991. **TI** Exchange Rate Volatility and International Prices. **AU** Feenstra, Robert C.; Kendall, Jon D. **AA** Feenstra: University of California, Davis. Kendall: University of Tasmania. **SR** National Bureau of Economic Research Working Paper: 3644; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** F31, F14, F32. **KW** Exchange Rate. Exports. Prices. Risk Premium. Foreign Exchange.

AB We examine how exchange rate volatility affects exporter's pricing decisions in the presence of optimal forward covering. By taking account of forward covering, we are able to derive an expression for the risk premium in the foreign exchange market, which is then estimated as a generalized ARCH model to obtain the time-dependent variance of the exchange rate. Our theory implies a connection between the estimated risk premium equation, and the influence of exchange rate volatility on export prices. In particular, we argue that if there is no risk premium, then exchange rate variance can only have a negative impact on export prices.

Feinstein, Jonathan S.

TI Public Goods in Trade: On the Formation of Markets and Political Jurisdictions. **AU** Casella, Alessandra; Feinstein, Jonathan S.

TI Public Goods in Trade: On the Formation of Markets and Political Jurisdictions. **AU** Casella, Alessandra; Feinstein, Jonathan S.

Feldstein, Martin

PD February 1991. **TI** Reducing the Risk of Economic Crisis. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3620; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** \$2.00. **JE** O51, E32, E44. **KW** Banking. Financial Markets. Economic Crises.

AB This paper examines the four most important potential economic crises that the United States faced in the 1980s in order to see what lessons can be drawn, individually and collectively, from these experiences; (1) developing country debt crisis; (2) 1987 stock market crash; (3) failures of savings and loan institutions; and (4) commercial bank failures.

Fernandez, Raquel

PD March 1991. **TI** Debt Concentration and Secondary Market Prices: A Theoretical and Empirical Analysis. **AU** Fernandez, Raquel; Ozler, Sule. **AA** Fernandez:

Stanford University. Ozler: Harvard University. **SR** National Bureau of Economic Research Working Paper: 3654; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 38. **PR** \$2.00. **JE** G21. **KW** Banking. Commercial Banks. Secondary Market. Debt. Credit.

AB In the context of a model that distinguishes between large money center banks and smaller regional banks, we show that the percentage of a country's debt held by the large banks affects the secondary market price of that country's debt: the higher the concentration of the debt, the higher the secondary market price. We also show that the free trade of debt in the secondary market does not necessarily imply the entire stock of debt will eventually be owned by the large banks. Our empirical analysis incorporates a number of potential determinants of secondary market prices. Among these are variables that are associated with a country's economic performance, variables that can be associated with the regulatory structure in the creditor's country, and the concentration of debt in the hands of the largest U.S. banks. Our empirical findings indicate that concentration indeed has a positive effect on secondary market prices.

Ferrall, Christopher

PD March 1991. **TI** Promotion and Incentives in Partnerships: Theory and Evidence. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 808; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 33. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** M12, J44, J33, L21. **KW** Promotions. Incentives. Partnerships. Firm Growth.

AB I analyze the use of promotions as an incentive and screening device in professional partnerships. Partners make production decisions and share in profits. Incentives are modeled as a multi-agent tournament. Associates provide effort to the firm by competing for promotions. Promotions also screen associates by selecting the most skilled to be partners. Either or both of these aspects of promotions lead to endogenous long-run growth of firms. Competition to hire associates leads firms to offer equal expected utility to incoming workers. This constraint is estimated using cross-sectional data on major U.S. law firms. Tournament effects explain the data significantly better than a pure screening model. A uniform distribution of underlying skill is chosen by the data. In this case incentives alone can not generate interior solutions for a firm's growth rate. Screening and incentives jointly explain firm growth and inter-firm variation in compensation.

Ferreira, R. Dos Santos

TI Imperfect Competition, Rational Expectations and Unemployment. **AU** d'Aspremont, Claude; Ferreira, R. Dos Santos; Gerard-Varet, L. A.

Fershtman, Chaim

PD February 1991. **TI** Complexity Considerations and Market Behavior. **AU** Fershtman, Chaim; Kalai, Ehud. **AA** Fershtman: Tel Aviv University. Kalai: Northwestern University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 4-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 32. **PR** no charge. **JE** D43, L11, L52, D21. **KW** Market Structure. Competition. Oligopoly.

AB The paper is concerned with market behavior when firms have limited ability to handle effectively the complexity of changing market conditions and strategic interaction. Modeling the managerial bounded rationality by using the concept of strategic complexity as measured by finite automation, we show that market behavior can be considerably altered once there is a limit on the complexity of strategies. In particular, the paper demonstrates that when an incumbent firm operates in several markets an entry to one market may induce the incumbent to exit from another market (divestiture) in order to "concentrate" on the competition it faces. For different parameters the incumbent may react to such an entry by exit from the same market creating specialization.

PD March 1991. **TI** The "Perverse" Effects of Wage and Price Controls in Search Markets. **AU** Fershtman, Chaim; Fishman, Arthur. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 11-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 22. **PR** no charge. **JE** J51, J31, J38, D40. **KW** Minimum Wages. Search Theory. Wages. Prices. Unions.

AB This paper examines the effects of price ceilings and minimum wages on the performance of markets in which agents must invest in costly search to become informed about prices or wages. In this context it is found that the market equilibrium may respond to changes in policy instruments in strikingly counterintuitive ways. In particular, the imposition of price ceilings and minimum wages may respectively result in consumer price increases and wage decreases. Thus an important implication of our analysis is that when unions fight to increase wages by raising the minimum wage, they may, paradoxically, actually be reducing the average wage of its members.

Ferson, Wayne E.

PD February 1991. **TI** Habit Persistence and Durability in Aggregate Consumption: Empirical Tests. **AU** Ferson, Wayne E.; Constantinides, George M. **AA** Ferson: University of Chicago. Constantinides: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3631; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** \$2.00. **JE** D11, D12. **KW** Consumption. Preferences. Utility Theory. Durable Goods.

AB Habit persistence in consumption preferences and durability of consumption goods are two hypotheses which imply time-nonseparability in the derived utility for consumption expenditures. We study a simple model with both effects, in which lagged consumption expenditures enter the Euler equation. Habit persistence implies that the coefficients on the lagged expenditures are negative, while durability implies positive coefficients. If both effects are present, then estimating the sign of the coefficients addresses the question as to which of the two effects is dominant. Earlier empirical work on monthly data supported the durability of consumption expenditures. We estimate and test the Euler equation using monthly, quarterly and annual data and find evidence that habit persistence dominates the effect of durability.

Fiorina, Morris

TI Why are there so Many Divided Senate Delegations? **AU** Alesina, Alberto; Fiorina, Morris; Rosenthal, Howard.

Fischer, Klaus

TI Banks, Finance and Investment in West Germany since 1970. **AU** Edwards, J. S. S.; Fischer, Klaus.

Fischer, Stanley

PD December 1990. **TI** Money, Interest, and Prices. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 3595; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 16. **PR** \$2.00. **JE** B22, B31, E10. **KW** Macroeconomics. Monetary Theory. Economic Thought.

AB Twenty five years after the publication of the second edition, this paper describes and evaluates the contributions to monetary and macroeconomics made in Don Patinkin's, "Money, Interest, and Prices". Its first accomplishment was to settle definitively many issues, such as the valid and invalid dichotomies between real and nominal magnitudes, Say's identity, the nature of the Keynesian system, and the requirements for the neutrality of money, which had been disputed for decades. It also opened the road to the future by developing macroeconomic models from a well specified microeconomic foundation. In so doing, it established the base on which subsequent equilibrium macroeconomics built.

PD May 1991. **TI** Privatization in East European Transformation. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 3703; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** \$2.00. **JE** L33, O52, P51. **KW** Socialism. Privatization. Eastern Europe. Economic Systems.

AB Privatization of state assets is an essential step to the creation of a viable private sector in the formerly socialist economies of Eastern Europe and the Soviet Union. A standard approach to the problem has rapidly emerged. Small firms are being privatized by sale very rapidly. The strategy then turns to larger industrial firms, which are to be corporatized as soon as possible, moved out of the shelter of the ministries that now in principle control them, and put under the direction of corporate boards; at the next stage the intention is to distribute shares. I analyze the standard approach and alternatives, as well as progress in implementing privatization, with emphasis on Poland, Hungary, and Czechoslovakia.

Fishburn, Peter C.

PD February 1991. **TI** Yes-No Voting. **AU** Fishburn, Peter C.; Brams, Steven J. **AA** Fishburn: AT&T Bell Laboratories. Brams: New York University. **SR** New York University Economic Research Reports: 91-09; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 29. **PR** no charge. **JE** D71, D72. **KW** Voting. Coalitions. Social Choice. Government. Legislature.

AB Yes-No (Y-N) voting is a voting method for choosing a governing coalition in a parliament after the seating of its members. Each member can designate a party to be Y(it must be included in the governing coalition), N(it must be excluded from the governing coalition), or neither (it may be either in or out of the governing coalition). The majority coalition acceptable to the most voters, because it includes all parties that these voters designate Y and no parties that they designate N, is given the first opportunity to form a government. The possible combinations of majority coalitions that a member

might vote for in different situations is derived. Those based on the choice of "consistent" voting strategies, and those which involve "interval" strategies, are defined and analyzed. Examples illustrate a number of different phenomena, such as when a rational voter might not be loyal to his or her party by designating it Y. The application of Y-N voting to the election of committees, and its refinement to allow voters to specify the order in which parties are to be included or excluded, are discussed.

Fishman, Arthur

TI The "Perverse" Effects of Wage and Price Controls in Search Markets. **AU** Fershtman, Chaim; Fishman, Arthur.

Flood, Robert P.

PD October 1990. **TI** Is the EMS the Perfect Fix? An Empirical Exploration of Exchange Rate Target Zones. **AU** Flood, Robert P.; Rose, Andrew K.; Mathieson, Donald J. **AA** Flood and Mathieson: International Monetary Fund. Rose: University of California at Berkeley. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 388; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 133. **PR** no charge. **JE** F31, E42, F33. **KW** EMS. Exchange Rate. Target Zone.

AB In the context of a flexible-price monetary exchange rate model and the assumption of uncovered interest parity, we obtain a measure of the fundamental determinant of exchange rates. Daily data for the European Monetary System is then used to explore the importance of nonlinearities in the relationship between the exchange rates and fundamentals. While some statistical evidence of nonlinearities in conditional means of exchange rates is detected, these seem to have little economic content. A number of implications of existing "target zone" exchange rate models are tested; little support is found for existing models of limited exchange rate flexibility.

PD December 1990. **TI** An Empirical Exploration of Exchange Rate Target-Zones. **AU** Flood, Robert P.; Rose, Andrew K.; Mathieson, Donald J. **AA** Flood and Mathieson: International Monetary Fund. Rose: University of California, Berkeley. **SR** National Bureau of Economic Research Working Paper: 3543; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 38. **PR** \$2.00. **JE** E42, F31, F33. **KW** Exchange Rate. European Monetary System. Monetary Policy.

AB In the context of a flexible price monetary exchange rate model and the assumption of uncovered interest parity, we obtain a measure of the fundamental determinant of exchange rates. Daily data for the European Monetary System are used to explore the importance of nonlinearities in the relationship between the exchange rates and fundamentals. Many implications of existing "target zone" exchange rate models are tested; little support is found for existing nonlinear models of limited exchange rate flexibility.

Florens, Jean-Pierre

PD September 1990. **TI** Weak Conditional Independence and Relative Invariance in Bayesian Statistics. **AU** Florens, Jean-Pierre; Mouchart, Michel; Rolin, Jean-Marie. **AA** Florens: Universite des Sciences Sociales, Toulouse. Mouchart and Robin: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9052; Universite Catholique de Louvain, Voie du

Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. PG 37. PR not available. JE C11, C44. KW Bayesian Analysis. Measure Theory. Decision Theory. AB In this paper, the concept of invariance, standard in measure theory, is extended to the conditional case and is shown to provide a suitable framework to define invariant Bayesian experiments, even in the case of improper prior distributions. Also, the concept of conditional independence, standard in probability theory, is extended to the case of sigma-finite (but unbounded) measures. Both extensions require, as a preliminary step, to work out necessary conditions for the existence of a well-defined "marginal-conditional" decomposition (actually, a disintegration) of a sigma-finite measure. This framework is then used to handle invariance arguments in Bayesian statistics, with a particular emphasis on the search for mutually sufficient pairs of parameters and statistics.

Forges, Francoise

PD November 1990. TI Some Thoughts on Efficiency and Information. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9071; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. PG 17. PR not available. JE D71, D81, C78, C62, D83. KW Bayesian Theory. Collective Choice. Decision Theory.

AB We reconsider classical (ex post) efficiency in Bayesian collective choice problems. This criterion and related ones are indeed appropriate to evaluate the durability of decisions selected by a mechanism, as opposed to the stability of the mechanism itself. We introduce a variant of classical efficiency which takes into account the information revealed by mechanisms. When values are private, our concept coincides with the usual one. But every Bayesian collective choice problem can be solved by a mechanism which is incentive compatible and efficient in our sense. Unfortunately, the conjunction of incentive compatibility and ex post efficiency does not capture the positive features of Pareto optimality. We strengthen the two previous requirements in order to get renegotiation-proof mechanisms. The existence result survives.

Fourgeaud, Claude

PD December 1990. TI Credit Granting and Determination of Interest Rates. AU Fourgeaud, Claude; Gourieroux, Christian; Pradel, Jeanine. AA Fourgeaud and Gourieroux: CEPREMAP. Pradel: University of Paris IX. SR CEPREMAP Discussion Paper: 9004; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 47. PR 20 F. JE G21, E41, E43. KW Credit. Banks. Interest Rates. Loans.

AB In this paper we present a simple model of optimization of the expected benefit of a credit institution, where the control variables are both the decision of acceptance or rejection of the credit seeker and the proposed interest rate. We obtain a scoring method more complex than the usual ones and simultaneously the optimal interest rates corresponding to the different categories of customers. Moreover we may study the modifications of the credit conditions as functions of some exogenous variables such as the ceiling rate, the refinancing rate, the quality of the customers or the precision of the available information. Paper in French.

Frank, Richard G.

PD February 1991. TI Updated Estimates of the Impact of Prenatal Care on Birthweight Outcomes by Race. AU Frank, Richard G.; Strobino, Donna M.; Salkever, David S.; Jackson, Catherine A. AA Frank, Strobino and Salkever: Johns Hopkins University. Jackson: University of Maryland. SR National Bureau of Economic Research Working Paper: 3624; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 17. PR \$2.00. JE J13, I12, J15. KW Children. Fertility. Minorities. Health Care.

AB This paper estimates a quasi-structural birth weight production function using data on counties for the years 1975-1984. The analysis focuses on the effects of first trimester initiation of prenatal care, controlling for use of abortion services, cigarette smoking, birth order and income. Fixed effects model is used to control for unmeasured differences in health endowments across counties. The results indicate that early first trimester initiation of prenatal care leads to a reduction in low birth weight for both blacks and whites. Differences in use of prenatal care by race explain only a small part of the black-white differences in the fraction of low birth weight births.

Franke, J.

PD October 1990. TI On Bootstrapping Kernel Spectral Estimates. AU Franke, J.; Hardle, Wolfgang K. AA Franke: University of Kaiserslautern. Hardle: Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9058; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. PG 24. PR not available. JE C22, C13, C14, C51. KW Bootstrap. Time Series. Kernel Estimation. Bandwith.

AB An approach to bootstrapping kernel spectral density estimates is described which is based on resampling from the periodogram of the original data. We show that it is asymptotically valid under suitable conditions, and we illustrate its performance for a medium-sized time series sample with a small simulation study.

Frech, H. E., III

PD February 1991. TI Scale Economies for Hospitals: A Multivariate Survivor Analysis. AU Frech, H. E., III; Mobley, Lee Rivers. AA Frech: University of California, Santa Barbara. Mobley: University of Maine, Orono. SR University of California at Santa Barbara Department of Economics Working Paper: 3-91; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. PG 34. PR no charge. JE I11, I12. KW Hospitals. Health Care. Medical Care.

AB The existence of scale economies in the hospital industry is important for both public and managerial policy. Production and cost function studies based on accounting data have found conflicting results, though the more sophisticated later studies have more often found scale diseconomies. At the same time, industry participants and observers believe that there are scale economies. Using survivor analysis, we resolve the conflict in favor of scale economies. We reconcile the disparate results. Taking advantage of the multivariate approach, we find suggestive evidence that, contrary to the popular wisdom, membership in multihospital systems is harmful to growth.

PD February 1991. TI Health Insurance: Designing

Products to Reduce Costs. AA University of California, Santa Barbara. SR University of California at Santa Barbara Department of Economics Working Paper: 2-91; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. PG 42. PR no charge. JE G22, I11. KW Health Insurance. Insurance. Medical Costs. Health Care.

AB This essay surveys competition among health insurers. Stress is placed on the history and special role of the Blue Cross and Blue Shield plans, which dominate in many markets. The Blue plans, founded by the Medical societies and the Hospital Associations, continue to promote overly complete insurance with little consumer copayment. This type of insurance raises demand and reduces competition among doctors and hospitals. The paper also discusses the increasing competition in health insurance markets from plans that more actively control medical care costs, such as Health Maintenance Organizations and Preferred Provider Organizations.

TI Predatory Pricing and the Importance of Intent. AU Comanor, William S.; Frech, H. E., III.

French, Kenneth R.

PD January 1991. TI Investor Diversification and International Equity Markets. AU French, Kenneth R.; Poterba, James M. AA French: University of Chicago. Poterba: Massachusetts Institute of Technology. SR National Bureau of Economic Research Working Paper: 3609; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 13. PR \$2.00. JE G11, G15, F21. KW Portfolio Choice. International Markets. International Investment.

AB The benefits of international diversification have been recognized for decades. In spite of this, most investors hold nearly all of their wealth in domestic assets. In this paper, we construct new estimates of the international equity portfolio holdings of investors in the U.S., Japan, and Britain. More than 98% of the equity portfolio of Japanese investors is held domestically; the analogous percentages are 94% for the U.S., and 82% for Britain. We use a simple model of investor preferences and behavior to show that current portfolio patterns imply that investors in each nation expect returns in their domestic equity market to be several hundred basis points higher than returns in other markets. This lack of diversification appears to be the result of investor choices, rather than institutional constraints.

Frenkel, Jacob A.

PD December 1990. TI Basic Concepts of International Taxation. AU Frenkel, Jacob A.; Razin, Assaf; Efraim, Sadka. AA Frenkel: National Bureau of Economic Research and International Monetary Fund. Razin: National Bureau of Economic Research and Tel Aviv University. Sadka: Tel Aviv University. SR National Bureau of Economic Research Working Paper: 3540; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 24. PR \$2.00. JE H21, F21, H25. KW Taxes. Capital Mobility. Trade Model.

AB Free movements of goods and capital across national borders have important implications for both direct and indirect taxation. The paper discusses the following issues: (a) The implications of different treatments of resident capital income originating abroad and nonresident capital income originating

at home; (b) The implications of different treatments of exports and imports under the indirect tax system (VAT); (c) What is the economically efficient international tax structure.

PD March 1991. TI International VAT Harmonization: Economic Effects. AU Frenkel, Jacob A.; Razin, Assaf; Symansky, Steven. AA Frenkel and Symansky: International Monetary Fund. Razin: Tel Aviv University. SR National Bureau of Economic Research Working Paper: 3656; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 41. PR \$2.00. JE H21, F15, F42, F43, F41. KW Taxes. Economic Integration. International Policy. Policy Coordination.

AB This paper highlights macroeconomic issues pertinent to the understanding of the international and domestic effects of international VAT harmonization. It outlines elements of the policies of VAT harmonization envisaged for Europe of 1992, and develops a basic tax model which is suitable for the analysis of the incentive effects of various tax policies and their welfare implications. The model emphasizes the effects of changes in the time profile of the various taxes on the intertemporal allocations of savings, investment, and labor. Dynamic simulations reveal that the macroeconomic and welfare implication of VAT harmonization depend critically on the tax system and on the degree of substitution governing temporal and intertemporal allocation.

Froot, Kenneth A.

PD March 1991. TI Exchange Rate Dynamics under Stochastic Regime Shifts: A Unified Approach. AU Froot, Kenneth A.; Obstfeld, Maurice. AA Froot: Massachusetts Institute of Technology. Obstfeld: University of California, Berkeley. SR Centre for Economic Policy Research Discussion Paper: 522; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 32. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F31, E42, E52. KW Monetary Regime. Exchange Rate. Target Zone.

AB Simple techniques of regulated Brownian motion are used to analyze the behavior of the exchange rate when official policy reaction functions are subject to future stochastic changes. We examine exchange rate dynamics in cases where the authorities promise (i) to confine a floating rate within a predetermined range, (ii) to peg the currency once it reaches a predetermined future level, and (iii) to unify a system of dual exchange rates. Similarities between these and several related examples of regime switching are stressed. We also discuss how stochastic regime changes can affect some standard statistical tests of hypotheses about exchange rates.

PD April 1991. TI The EMS, the EMU, and the Transition to a Common Currency. AU Froot, Kenneth A.; Rogoff, Kenneth. AA Froot: Massachusetts Institute of Technology. Rogoff: University of California at Berkeley. SR National Bureau of Economic Research Working Paper: 3684; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 37. PR \$2.00. JE F31, E58, F33, E40. KW Central Bank. Exchange Rates. European Monetary System.

AB When central banks are about to relinquish control over their exchange rate and enter into a currency union, the reputational costs to devaluation are very low. As with any finite horizon game, the endpoint affects the earlier expectations of private agents, here causing them to demand

higher interest rates and higher wages from countries whose currencies are relatively weak. In looking at the countries within the EMS, we find that Italian long-term interest rates as well as price and wages levels relative to Germany show evidence of growing gaps.

Fry, Tim R. L.

PD February 1991. **TI** A Generalized Logistic Tobit Model. **AA** Monash University. **SR** Monash Department of Econometrics Working Paper: 1/91; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 15. **PR** no charge. **JE** C24, C51. **KW** Logistic Distribution. Tobit Model. Heterogeneity.

AB This paper proposes the use of a generalization of the Logistic distribution, the Burr Type II distribution, as the error structure in a Type I (Standard) Tobit model. The use of the Burr II is motivated through both a heterogeneity argument and by noticing the need for potentially non-symmetric distributions in Tobit models. Tests for symmetry (the Logistic distribution) and its implied heterogeneity are also proposed. Finally the model is estimated using Australian data on alcohol expenditure.

Gabszewicz, Jean J.

PD 1990. **TI** Sequential Entry, Experience Goods and Brand Loyalty. **AU** Gabszewicz, Jean J.; Pepall, Lynne; Thisse, Jacques-Francois. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9063; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 25. **PR** not available. **JE** L11, L14, L15. **KW** Duopoly Model. Brand Loyalty. Reputation.

AB We examine first-mover advantages in an experience good market using a two-period duopoly model with sequential entry in which consumers differ in their willingness to try new products. First entrants producing quality goods are found to enjoy a subsequent brand loyalty advantage in competition with later entrants. This advantage is exploited by initially offering the good at a low price. First entrants producing poor products cannot generate customer loyalty. Such firms engage in "fly by night" pricing, initially charging a high price and then lowering it. These theoretical findings appear to correspond closely with available empirical evidence.

TI Cournot, Cournot-Walras and Walras Equilibria in Exchange Economies: An Example. **AU** Codognato, Giulio; Gabszewicz, Jean J.

Gagnon, Joseph E.

PD October 1990. **TI** Pricing to Market in International Trade: Evidence from Panel Data on Automobiles and Total Merchandise. **AU** Gagnon, Joseph E.; Knetter, Michael M. **AA** Gagnon: Board of Governors of the Federal Reserve System. Knetter: Dartmouth College. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 389; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 71. **PR** no charge. **JE** F31, F14, F23. **KW** Pass-Through. Segmented Markets. Exchange Rate. International Trade. Exports.

AB This paper focuses on price discrimination in international trade that is associated with movements in exchange rates. This phenomenon is referred to as "pricing to market." We find strong evidence of pricing to market for

Japanese exports of automobiles. We find moderate evidence of such behavior for German auto exports, and very little pricing to market for U.S. auto exports. We conjecture that these sharp differences in export pricing behavior may be due to differences in the extent of overseas production by firms based in these countries. Pricing to market may be more important to firms that do not have plants in their target markets.

Gandal, Neil

TI Network Effects and Software Provision. **AU** Church, Jeffrey; Gandal, Neil.

PD February 1991. **TI** Coordinating Research through Research Joint Ventures. **AU** Gandal, Neil; Scotchmer, Suzanne. **AA** Gandal: Tel Aviv University. Scotchmer: University of California, Berkeley. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 6-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 27. **PR** no charge. **JE** O31, O32, L14. **KW** Investment. R&D. Joint Ventures. Cooperation. Patents. Patent Law.

AB We ask to what extent joint ventures can improve on the crude incentives for research provided by patent law. In a simple model, we show that a joint venture can implement the rates of investment that maximize joint profit when firms' research abilities are private information. This can be done with budget balance, even though there are participation constraints given by the noncooperative alternative, which is a patent race. There is conflict between budget balance and participation constraints because the firms' payoff can depend on ex post signals of abilities. The conflict between budget balance and participation constraints is restored when both abilities and rates of investment are unobservable. We give a condition under which the profit maximizing rates of investment can be implemented if we relax budget balance or the participation constraints.

TI Complementary Network Externalities and Technological Adoption. **AU** Church, Jeffrey; Gandal, Neil.

TI Product Differentiation: Bertrand Competition versus Monopolistic Competition. **AU** Church, Jeffrey; Gandal, Neil.

Garber, Alan M.

PD March 1991. **TI** Nursing Home Discharges and Exhaustion of Medicare Benefits. **AU** Garber, Alan M.; MaCurdy, Thomas E. **AA** Garber: National Bureau of Economic Research. MaCurdy: Stanford University. **SR** National Bureau of Economic Research Working Paper: 3639; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 33. **PR** \$2.00. **JE** J14, L84. **KW** Nursing Homes. Elderly. Medicare.

AB The price sensitivity of demand for nursing home care is a subject of considerable policy interest. Standard methods for measuring price responsiveness are difficult to apply to nursing home care, since accurate price information is usually unavailable and prices may reflect unmeasured quality characteristics. We estimate price sensitivity by exploiting the dynamic price variation implicit in Medicare payment rules for nursing home care. We determine whether the hazard rate for nursing home discharge shifts in response to the price changes that occur when Medicare coverage diminishes or ends. Our findings provide strong evidence that the duration of nursing

home admissions is sensitive to price.

Garber, Peter M.

PD January 1991. **TI** Alexander Hamilton's Market Based Debt Reduction Plan. **AA** Brown University. **SR** National Bureau of Economic Research Working Paper: 3597; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 38. **PR** \$2.00. **JE** H63, N41. **KW** Public Debt. Brady Plan. Treasury. Government Policy.

AB In 1790, Alexander Hamilton, the first Secretary of the Treasury of the United States, initiated a program to refund the U.S. debt. Debt that had sold at 75% discount two years earlier would be refunded at par into new funded debt of the new federal government. All foreign indebtedness would be repaid. I present evidence that Hamilton's actual refunding policy did not differ in nature from that envisioned under the recent Brady plan. I will show that the bond package for which the old debt exchanged had a market value well below par. Thus, a large part of the face value of the debt was effectively written off. I compare the Hamilton restructuring package to the recent Mexican restructuring package to find points of similarity to the Brady plan.

Gerard-Varet, L. A.

TI Imperfect Competition, Rational Expectations and Unemployment. **AU** d'Aspremont, Claude; Ferreira, R. Dos Santos; Gerard-Varet, L. A.

Gerlach, Stefan

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

Gevers, Louis

TI Invariance, Neutrality and Weakly Continuous Expected Utility. **AU** d'Aspremont, Claude; Gevers, Louis.

Giovannini, Alberto

PD January 1991. **TI** Government Revenue from Financial Repression. **AU** Giovannini, Alberto; de Melo, Martha. **AA** Giovannini: Columbia University. de Melo: The World Bank. **SR** National Bureau of Economic Research Working Paper: 3604; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** \$2.00. **JE** E62, H63, E13, E32. **KW** Public Finance. Capital Controls. Public Debt.

AB This paper presents an analysis of the theoretical underpinnings and the relevance of the phenomenon of financial repression from a public finance perspective. The analysis explicitly accounts for the interaction between capital controls and financial repression. The proposed empirical estimate of the revenue from financial repression is based on the difference between the domestic and the foreign cost of borrowing of the government. The correlations of the revenue from financial repression with inflation, exchange rates and per-capita income are discussed.

PD January 1991. **TI** Fiscal Rules in the European Monetary Union: A No-Entry Clause. **AU** Giovannini, Alberto; Spaventa, Luigi. **AA** Giovannini: Columbia University. Spaventa: Universita di Roma. **SR** Centre for Economic Policy Research Discussion Paper: 516; Centre for Economic Policy Research, 6 Duke of York Street, London

SW1Y 6LA, ENGLAND. **PG** 29. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F36, F42, E61, E63. **KW** Fiscal Policy. European Community. Policy Coordination.

AB The paper examines the possible motivations behind the plea for fiscal rules in the Delors Report. We argue that coordination problems arising from aggregate demand spillovers cannot be solved by means of budget rules and that in any case they are not important in Europe. We then discuss the notion of structural fiscal imbalances and show that potential solvency is a problem for some European countries, probably made more severe by EMU. Membership of countries with unsustainable positions may represent a risk for the stability of the union because of financial spillovers. Neither monetary discipline enforced by a "conservative" European Central Bank nor market discipline will by themselves prevent fiscal non-discipline or insulate the union from its consequences.

PD January 1991. **TI** Government Revenue from Financial Repression. **AU** Giovannini, Alberto; de Melo, Martha. **AA** Giovannini: Columbia University. de Melo: The World Bank. **SR** Centre for Economic Policy Research Discussion Paper: 489; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 30. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** H63, E62, E66. **KW** Public Finance. Capital Controls. Public Debt. Borrowing.

AB This paper analyzes from a public finance perspective, the theoretical underpinnings and the empirical relevance of the phenomenon of financial repression. The analysis explicitly accounts for the interaction between capital controls and financial repression. The proposed empirical estimate of the revenue from financial repression is based on the difference between the domestic and the foreign cost of borrowing of the government. The correlations of the revenue from financial repression with inflation, exchange rates and per capita income are discussed.

PD February 1991. **TI** Currency Substitution and the Fluctuations of Foreign-Exchange Reserves with Credibly Fixed Exchange Rates. **AA** Columbia University. **SR** National Bureau of Economic Research Working Paper: 3636; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$2.00. **JE** E41, E42, E52. **KW** Exchange Rates. Currency. Money Demand. Foreign Exchange.

AB This paper studies the fluctuations of foreign exchange reserves under a regime of credibly fixed exchange rates. The paper considers a variety of assumptions on the determinants of money demand and currency substitution.

Godley, Wynne A. H.

PD May 1990. **TI** Time, Increasing Returns and Institutions in Macroeconomics. **AA** Kings College, Cambridge. **SR** University of Cambridge DAE Working Paper: 9023; Department of Applied Economics, University of Cambridge, Sidwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 25. **PR** \$4.00 (2.00 pounds) checks payable to University of Cambridge. **JE** E25, E13, E31, E51. **KW** Macroeconomic Theory. Inflation. Income Distribution. Banks. Credit. Macroeconomic Model.

AB This paper summarizes a position alternative to the equations of the "neoclassical synthesis" which underpin the

aggregate demand and supply analysis in standard textbooks on macroeconomics. Our model postulates that firms and banks, as well as households and governments, have a crucial role to play in macroeconomic developments and the interrelationship between the sectors requires, for a start, a comprehensive system of balance sheets related to one another by flow variables - all inflation accounted. Firms are assumed to produce under conditions of increasing returns and their decisions to be motivated by the wish to maximize market shares. Banks play an indispensable role by providing the credit required when production takes time. The distribution of national income (between households, firms, creditors, and the government) is modeled explicitly and inflation is seen as the outcome of a conflict between these sectors for shares of real national income.

Gokhale, Jagadeesh

TI Generational Accounts - A Meaningful Alternative to Deficit Accounting. **AU** Auerbach, Alan J.; Gokhale, Jagadeesh; Kotlikoff, Laurence J.

Goldberg, Linda S.

PD January 1991. **TI** Exchange Rates and Entry, Exit and Investment in U.S. Industry. **AA** New York University and National Bureau of Economic Research. **SR** New York University Economic Research Reports: 91-06; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 29. **PR** no charge. **JE** F31, E32, L11, L16, G31. **KW** Exchange Rate. Investment. Business Investment. Market Structure.

AB This paper generates stylized facts on the relationship between exchange rate trend and volatility and business formation, business failure and sectoral investment in new plant and equipment in the United States. Correlation studies support the view that the path of the dollar in the 1970s and early 1980s was associated with persistent restructuring of United States industry. Among the most striking results from sectoral investment studies are, on balance, that: i) contemporaneous dollar depreciations were associated with investment expansions in the 1970s and investment contractions in the 1980s; ii) short-term volatility of the dollar was associated with investment expansions in both the 1970s and the 1980s, although the latter period showed a larger number of associated investment contractions; iii) long-term dollar volatility was strongly associated with contracted investment in both the 1970s and the 1980s; and iv) in the 1980s, long-term trend depreciations of the dollar were strongly associated with investment expansions, with this result strongest during periods of high dollar volatility.

PD February 1991. **TI** Internal Currency Markets and Production in the Soviet Union. **AU** Goldberg, Linda S.; Karimov, Il'dar. **AA** Goldberg: New York University. Karimov: CEMI, Moscow. **SR** National Bureau of Economic Research Working Paper: 3614; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** \$2.00. **JE** O53, P52, O11. **KW** Economic Reform. Currency. Exchange Rate. Economic Policy. Economic Development.

AB This paper considers the impact of macroeconomic and microeconomic policy tools on enterprise activities within an economy in the process of economic reform. Assuming a dual exchange rate regime and the type of increased enterprise

autonomy introduced as components of partial economic reform as in the Soviet Union, policy changes induce shifts in production and hard currency allocation decisions. This paper considers the implications for: the supply of hard currency to internal auctions or interbank markets; the free internal price of foreign exchange; export volumes; the trade balance; the supply of goods available for internal consumption; and open and hidden inflation.

Gollier, Christian

TI Risk-Sharing on the Labour Market and Second-Best Wage Rigidities. **AU** Dreze. Jacques H.; Gollier, Christian.

Gong, Byeong-Ho

PD February 1991. **TI** Finite Sample Evidence on the Performance of Stochastic Frontiers and Data Envelopment Analysis Using Panel Data. **AU** Gong, Byeong-Ho; Sickles, Robin C. **AA** Gong: Korea Economic Research Institute. Sickles: Rice University. **SR** New York University Economic Research Reports: 91-12; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 37. **PR** no charge. **JE** C23, C15, C51. **KW** Stochastic Frontiers. Data Envelopment Analysis. Panel Data. Monte Carlo Model.

AB In recent years a number of alternative methods have been proposed with which to measure technical efficiency. However, we know little of their comparative performance. In this study we examine the relative strengths of two different methodologies - stochastic frontier models and data envelopment analysis - in estimating firm-specific technical efficiency. To address the limitations of previous studies we utilize Monte Carlo techniques which allow us to control the structure of the underlying technology and the stochastic environment.

Gorecki, Paul K.

TI Distinguishing Characteristics of Foreign High Technology Acquisitions in Canada's Manufacturing Sector. **AU** Baldwin, John R.; Gorecki, Paul K.

Gorton, Gary

PD December 1990. **TI** Banks and Loan Sales: Marketing Non-Marketable Assets. **AU** Gorton, Gary; Pennacchi, George. **AA** Gorton: University of Pennsylvania. Pennacchi: University of Illinois. **SR** National Bureau of Economic Research Working Paper: 3551; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** G21. **KW** Loans. Commercial Banks. Banking.

AB A defining characteristic of bank loans is that they are not resold once created. Yet, in 1989 about \$240 billion of commercial and industrial loans were sold, compared to trivial amounts five years earlier. Selling loans without explicit guarantee or recourse is inconsistent with theories of the existence of financial intermediation. What has changed to make bank loans marketable? In this paper we test for the presence of implicit contractual features of bank loan sales contracts that could explain this inconsistency. In addition, the effect of technological progress on the reduction of information asymmetries between loan buyers and loan sellers is considered. The paper tests for the presence of these features and effects using a sample of over 800 recent loan sales.

PD March 1991. **TI** The Enforceability of Private Money Contracts, Market Efficiency, and Technological Change. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3645; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 51. **PR** \$2.00. **JE** N21. **KW** Banking. Bank Notes. Economic History.

AB The period prior to the U.S. Civil War saw the introduction and rapid diffusion of the railroad. It was also the Free Banking Era (1838-1863) during which some states allowed relatively free entry into banking. Banks in all states issued distinct private monies, called bank notes, which circulated at discounts from face value in secondary markets at locations away from the issuing bank. This paper proposes a pricing model for bank notes, and then, using a newly discovered data set of monthly bank note prices for all banks in North America, studies the secondary market for privately issued bank notes during the American Free Banking Era, 1838-1859.

TI Trading, Communication and the Response of Price to New Information. **AU** Dow, James; Gorton, Gary.

Gottardi, Piero

PD August 1990. **TI** On Stationary Monetary Equilibria in Overlapping Generations Models with Incomplete Markets. **AA** Trinity College, Cambridge. **SR** University of Cambridge Economic Theory Discussion Paper: 155; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 52. **PR** \$4.00 (2.00 pounds); checks payable to University of Cambridge. **JE** D52, E51, E41. **KW** Overlapping Generations Models. Incomplete Markets. Monetary Theory. Monetary Equilibrium.

AB The objective of this paper is to characterize the stationary monetary equilibria in a stochastic overlapping generations model with a general incomplete asset structure. It is first proved that a stationary equilibrium with a non zero price of money generically exists and is locally isolated when there is outside money. With only inside money there will be a continuum of equilibria instead. Welfare issues are also addressed. Alternative notions of constrained optimality are discussed and a complete characterization of the equilibria satisfying a rather weak criterion of optimality is derived. It is shown that there are monetary equilibria which fail this test of efficiency. This goes against the common view associating monetary equilibria with optimality in overlapping generations economies.

PD October 1990. **TI** On the Non Neutrality of Money with Incomplete Markets. **AA** Trinity College, Cambridge. **SR** University of Cambridge Economic Theory Discussion Paper: 158; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 29. **PR** \$4.00 (2.00 pounds); checks payable to University of Cambridge. **JE** E51, E52, D52, G12. **KW** Incomplete Markets. Monetary Policy.

AB In this paper we show that if markets are incomplete and there are nominal assets, whose payoff is denominated in money, monetary policy will be in general non neutral. The result is shown to be valid even for a policy with no direct redistributive effects, such as a policy of proportional money transfers. The mechanism through which monetary policy

operates is a change in the structure of the rates of return. This differs from previous arguments for non neutrality. By changing the level of money prices monetary policy affects the payoffs of the nominal assets. We also show that a consideration of the effects of monetary policy on the risk sharing opportunities of the agents may allow us to claim the superiority, from a welfare point of view, of a random money growth rate over a deterministic one.

PD October 1990. **TI** An Analysis of the Conditions for the Validity of Modigliani-Miller Theorem with Incomplete Markets. **AA** Trinity College, Cambridge. **SR** University of Cambridge Economic Theory Discussion Paper: 157; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 54. **PR** \$4.00 (2.00 pounds); checks payable to University of Cambridge. **JE** D52, D51, G11, G13. **KW** Capital Structure. Securities. Incomplete Markets. Portfolio.

AB In this paper we investigate the consequences of the firms' decisions about their capital structure in the framework of a perfectly competitive general equilibrium model with incomplete markets. We show that if markets are complete or if there are no derivative securities (such as options, forwards, or futures) written on the firms' shares, these decisions are irrelevant. This result reaffirms and qualifies the conditions for the validity of Modigliani-Miller theorem. If markets are incomplete, in the presence of any type of derivative security a change in the composition of the firms' portfolio modifies, generically, both the real equilibrium allocation and the value of the firm. The reason is that the payoff of the derivative security (even if it is simply a linear function of the payoff of equity) is affected in a nonlinear way by shifts in the firms' financial policy: thus the set of the attainable reallocations of revenue also changes.

Gourieroux, Christian

TI Credit Granting and Determination of Interest Rates. **AU** Fourgeaud, Claude; Gourieroux, Christian; Pradel, Jeanine.

Graetz, Michael A.

PD November 1989. **TI** Expert Opinions and Taxpayer Compliance: A Strategic Analysis. **AU** Graetz, Michael A.; Reinganum, Jennifer; Wilde, Louis L. **AA** Graetz: Yale University. Reinganum: University of Iowa. Wilde: California Institute of Technology. **SR** Caltech Social Science Working Paper: 710; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 36. **PR** no charge. **JE** H26, H21. **KW** Audits. Tax System. Tax Compliance. Tax Evasion.

AB In this paper we examine the incentives for taxpayers to claim risky deductions and to solicit expert opinions to support their positions, and for the tax agency to distinguish among individuals who do and do not solicit expert opinions for the purposes of auditing. We also consider the implications of an ex ante constraint on the tax agency which requires it to treat all taxpayers who take the deduction alike in terms of audit rates, whether or not they solicit an expert opinion. Finally, we examine the effects of regulations which limit the degree of riskiness for which a supporting opinion can be justified as well as the effects of changes in various penalty rates.

TI The Effect of Audit Rates on Federal Income Tax Filings

and Collections, 1977-1986. **AU** Dubin, Jeffrey A.; Graetz, Michael A.; Wilde, Louis L.

Greenwald, Bruce C.

PD March 1991. **TI** Information, Finance, and Markets: The Architecture of Allocative Mechanisms. **AU** Greenwald, Bruce C.; Stiglitz, Joseph E. **AA** Greenwald: Bell Communications Research. Stiglitz: Stanford University. **SR** National Bureau of Economic Research Working Paper: 3652; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 44. **PR** \$2.00. **JE** G21, G23, K20. **KW** Financial Institutions. Liability. Finance Theory.

AB While bankers and businessmen have long recognized the importance of finance, financial constraints, and financial institutions, they have played a secondary role in neoclassical economic theory. This paper identifies the economic functions with which financial institutions have been concerned, the central problems which they face, and the alternative ways by which those problems can and have been addressed. The importance of limited liability and the legal environment is stressed. The final section explores the relationship between information-based finance constraints, the evolution of the firm, and the growth of the economy.

Greenwood, Jeremy

PD March 1991. **TI** Tax Analysis in a Real Business Cycle Model: On Measuring Harberger Triangles and Okun Gaps. **AU** Greenwood, Jeremy; Huffman, Gregory W. **AA** Greenwood: Federal Reserve Bank of Minneapolis and University of Western Ontario. Huffman: University of California, Riverside and University of Western Ontario. **SR** Federal Reserve Bank of Minneapolis Staff Report: 138; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 35. **PR** no charge. **JE** E32, H21, E63, E37. **KW** Business Cycle. Stabilization Policy. Taxes. Taxation.

AB A tax distorted real business cycle model is parameterized, calibrated, and solved numerically in an attempt to measure the size of Harberger Triangles relative to Okun Gaps. In particular, the model constructed is used to study, quantitatively, the impact of various distortional government tax and subsidy schemes. It is shown that the government can use tax policy to stabilize cyclical fluctuations, and this is done for the economy being studied. The benefits of implementing such a stabilization policy are calculated and compared with the size of the welfare gains realized from reducing various tax distortions.

Grenier, Gilles

TI The Earnings of Linguistic Minorities: French in Canada and Spanish in the United States. **AU** Bloom, David E.; Grenier, Gilles.

Grether, David M.

PD April 1990. **TI** Testing Bayes Rule and the Representativeness Heuristic: Some Experimental Evidence. **AA** California Institute of Technology. **SR** Caltech Social Science Working Paper: 724; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 38. **PR** no charge. **JE** D81, C91, C70. **KW** Uncertainty. Experimental Economics. Incentives. Decision Theory.

AB The psychological literature has identified a number of heuristics which individuals may use in making judgements or choices under uncertainty. Mathematically equivalent problems may be treated differently depending upon details of the decision setting or upon how the decisions are framed. The results presented in this paper are consistent with those findings and are unsettling. In equivalent problems subjects appear to adopt different strategies in response to observing different data. All problems were inference problems about populations represented by bingo cages and all randomization was operational and observed by the subjects. Thus one cannot explain the change of decision strategy by appeal to changing reference points nor should difference between surface and deep structure of problems apply.

Griliches, Zvi

TI Purchased Services, Outsourcing, Computers, and Productivity in Manufacturing. **AU** Siegel, Donald; Griliches, Zvi.

TI Productivity, Market Power and Capacity Utilization when Spot Markets are Complete. **AU** Eden, Benjamin; Griliches, Zvi.

Grilli, Vittorio

TI Exchange Rate Volatility in Integrating Capital Markets. **AU** Corsetti, Giancarlo; Grilli, Vittorio; Roubini, Nouriel.

Grinols, Earl L.

PD March 1991. **TI** Stochastic Equilibrium and Exchange Rate Determination in a Small Open Economy with Risk Averse Optimizing Agents. **AU** Grinols, Earl L.; Turnovsky, Stephen J. **AA** Grinols: University of Illinois. Turnovsky: University of Washington. **SR** National Bureau of Economic Research Working Paper: 3651; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** \$2.00. **JE** F41, F43, F11. **KW** Open Economy. Macroeconomics. Exchange Rate. Economic Growth.

AB This paper constructs a stochastic general equilibrium model of a small open economy consisting of risk averse optimizing agents. The stochastic processes describing the rate of monetary growth, government expenditure, private production, and the foreign price level are taken to be exogenous, determining all asset risks and returns, and the equilibrium stochastic processes describing the domestic inflation rate and the exchange rate. The model is used to examine a number of issues. These include; (i) the effects of the means and variances of policy shocks on the equilibrium; (ii) the determinants of the foreign exchange risk premium; (iii) the relationship between net export instability and economic growth.

Grosfeld, Irena

TI Privatization in Hungary, Poland and Czechoslovakia. **AU** Hare, Paul; Grosfeld, Irena.

Grossman, Herschel

PD April 1991. **TI** Monetary Economics: A Review Essay. **AA** Brown University. **SR** National Bureau of Economic Research Working Paper: 3686; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** E41, E51, B22.

KW Money. Medium of Exchange. Monetary Economics. Fiat Money.

AB In this essay I define money to be whatever objects serve as generally acceptable media of exchange and I define monetary economics to be the study of the causes and economic consequences of the monetization of exchange -- that is, of the use of media of exchange. These definitions lead me to specify the distinctive objectives of monetary economics to be to understand: (1) the monetization of exchange and its relation to the technologies of production and of exchange, (2) the form that money takes and, especially, the viability of fiat money, (3) the determination and significance of the real value of units of money, and (4) the relation between the nominal quantity of money and aggregate economic activity. The essay tries to acquaint the reader with the contents of the recently published, "Handbook of Monetary Economics" as they relate to these objectives of monetary economics and offer some critical thoughts on selected unsettled issues in monetary economics that my reading of the Handbook suggested.

Gruen, David W. R.

PD July 1988. **TI** Ignorance and Ricardian Equivalence (or Keynesians of the World Unite, You Have Nothing to Lose but Your Bonds). **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 165; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** not available. **PR** no charge. **JE** E13, D91. **KW** Ricardian Equivalence.

AB A model is developed of a representative consumer who is ignorant of the link between bonds and future taxes. The consumer lives forever, optimizes intertemporally, and is exposed either to the changing level of Federal government debt in Australia or in the U.S. over the last twenty five years. "Best" estimates of the cost of ignorance are about \$A2 per annum for an Australian consumer or about \$7 per annum for a U.S. consumer (i.e. less than 0.1% in both instances). When uncertainty about future income and the existence of progressive taxes are included in the model these estimates are substantially reduced - even from this 0.1% level. It may therefore be optimal for consumers to ignore the link between bonds and future taxes.

PD July 1988. **TI** What People Know and What Economists Think They Know: Surveys on Ricardian Equivalence. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 164; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** not available. **PR** no charge. **JE** E13. **KW** Ricardian Equivalence.

AB Results from two surveys of relevance to the Ricardian equivalence theorem are presented. In the first survey, over six hundred undergraduate economics students estimate the amount of outstanding Federal government debt in Australia. In the second survey, eleven academic economists give their assessment of the proportion of the students who "have a rough idea of the amount of government debt" (in a sense defined precisely in the paper). The student's level of knowledge of the amount of outstanding debt is very meager, and the "average" academic overestimates it about fivefold. The relevance of these results to the Ricardian equivalence theorem is discussed.

Gul, Faruk

PD February 1991. **TI** Asymptotic Efficiency in Large Exchange Economies with Asymmetric Information. **AU** Gul, Faruk; Postlewaite, Andrew. **AA** Gul: Stanford University. Postlewaite: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 91-07; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 31. **PR** no charge. **JE** D51, D82, D81, C62. **KW** Implementation. Incentive Compatibility. Incomplete Information. General Equilibrium Model. Rational Expectations. Exchange Economy.

AB We provide conditions on an exchange economy with asymmetric information that guarantee that when that economy is replicated sufficiently often, there will be an allocation which is incentive compatible, individually rational and nearly efficient. The main theorem covers both the case in which aggregate uncertainty remains when the economy is replicated and the case in which replication eliminates aggregate uncertainty.

Guofu, Tan

PD November 1989. **TI** Entry and R&D Costs in Competitive Procurements and Contracting. **AA** California Institute of Technology. **SR** Caltech Social Science Working Paper: 708; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 28. **PR** no charge. **JE** L14, O32, L11, D44, D43. **KW** Market Structure. Contracts. Auctions. R&D. Industrial Organization.

AB A model of competitive procurements and contracting is presented. The key features of the model include pre-contract R&D, an endogenous number of symmetric firms, and a first-price sealed-bid procurement auction. The unique symmetric perfect free entry equilibrium is characterized. If the R&D technology is variable scale with constant marginal returns, it is socially optimal for one firm to do all of the R&D and production. However, since the buyer considers only his own cost of procurement, the buyer will prefer to allow free entry, and the number of firms will usually be larger than is socially optimal.

Gustman, Alan L.

PD January 1991. **TI** The Effects of Pensions and Retirement Policies on Retirement in Higher Education. **AU** Gustman, Alan L.; Steinmeier, Thomas L. **AA** Gustman: Dartmouth College. Steinmeier: Texas Tech University. **SR** National Bureau of Economic Research Working Paper: 3593; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 17. **PR** \$2.00. **JE** J44, J32, J22. **KW** Retirement. Teachers. Education. Labor Supply.

AB A structural retirement model is estimated using data for tenured, male faculty employed in the 1970's at 26 high quality private colleges and universities. Simulations of raising and then abolishing the mandatory retirement age suggest very large increases in full-time work by faculty members in their late 60's and early 70's. Simulations also suggest that early retirement incentive programs would offset only a small fraction of the increase in work due to changes in mandatory retirement, and that rents created by these programs exceed

savings from induced early retirements, with salaries of replacements further adding to costs.

Hagan, Jim

TI Multivariate Cointegration and Error Correction Models: An Application to Manufacturing Activity in Australia. **AU** Smith, Jeremy; Hagan, Jim.

Hall, Leslie A.

TI Capacitated Trees, Capacitated Routing, and Associated Polyhedra. **AU** Araque, G. Jesus Rafael; Hall, Leslie A.; Magnanti, Thomas L.

Hall, Stephen

PD April 1990. **TI** Monitoring Bank Risk - A Market Based Approach. **AU** Hall, Stephen; Miles, David K. **AA** Hall: Bank of England. Miles: Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 3/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 19. **PR** no charge. **JE** G21, C81. **KW** Financial Markets. Risk. Banking. Stock Market.

AB Monitoring risk is an essential part of financial market supervision in developed economies. But standard approaches to measuring default risks of banks suffer from numerous problems - nonmarketability of many bank assets and time-variation in the moments of asset prices being the most serious. In this paper an approach to measuring risk based on observable market data is developed which addresses these problems. Whether the method gives better indicators of default risks than standard procedures depends on the efficiency of stock markets. The procedure is tested using information on both solvent and failed banks.

PD March 1991. **TI** An Empirical Study of Recent Trends in World Bond Markets. **AU** Hall, Stephen; Miles, David K. **AA** Hall: London Business School. Miles: Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 3/91; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 33. **PR** no charge. **JE** G14, G11. **KW** Asset Returns. Portfolio. Bonds.

AB This paper uses recent data on exact holding period returns on portfolios of bonds issued by the governments of the major economies to assess efficiency and risk in financial markets. Several hypotheses about the nature of risk premia and the predictability of excess holding period returns are tested. The accuracy of linear approximations to holding period returns are analyzed.

Hallett, Andrew Hughes

PD January 1991. **TI** The European Monetary System: Achievements and Survival. **AU** Hallett, Andrew Hughes; Minford, Patrick; Rastogi, Anupam. **AA** Hallett: University of Strathclyde. Minford and Rastogi: University of Liverpool. **SR** Centre for Economic Policy Research Discussion Paper: 502; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 71. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, F33, F36, E52. **KW** European Monetary System. Exchange Rate. Monetary Policy.

AB The EMS's robustness in the face of stochastic shocks is studied, using the Liverpool World Model and the optimal

strategy algorithm of Brandsma and Hughes Hallett. The EMS began life in 1979 with a system design permitting regular parity changes; we find this design to be relatively unstable, even without monetary policy reaction, and potentially highly unstable under Nash noncooperative monetary policy, essentially because EMS countries that should be followers make over-active use of monetary policy and parity changes. Tough exchange controls (clearly some temporary controls are a practical requirement for the EMS survival in times of parity crisis) do not reduce instability, indeed can make it worse. However, monetary cooperation between EMS member removes much of the instability for EMS members; limiting parity change on its own does not help.

PD March 1991. **TI** Adjustment Difficulties within a European Monetary Union: Can They be Reduced? **AU** Hallett, Andrew Hughes; Vines, David. **AA** Hallett: University of Strathclyde. Vines: University of Glasgow. **SR** Centre for Economic Policy Research Discussion Paper: 517; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 44. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F33, F36, E63. **KW** European Community. Monetary Union. Europe. Fiscal Policy.

AB This paper analyzes four costs which may be associated with monetary union. First it (obviously) allows no "relative" monetary accommodation of the kind which may assist when dealing with asymmetric shocks. This can impose significant adjustment costs. Second it does not of itself prevent "absolute" accommodation to an inflation shock originating in all members, or even one member, of the union. Third, the distribution of benefits of membership of the union may be skewed. Finally, a union may require significant fiscal flexibility to mitigate against the adjustment costs. We investigate the form of fiscal flexibility which may be required, and we also propose a form of Soft Monetary Union which might alleviate the first problem.

Hamilton, Bob

PD February 1991. **TI** Decomposing the Welfare Costs of Capital Tax Distortions: The Importance of Risk. **AU** Hamilton, Bob; Mintz, Jack M.; Whalley, John. **AA** Hamilton: L'Esplanade Laurier. Mintz: University of Toronto. Whalley: University of Western Ontario and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3628; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** \$2.00. **JE** H25, H21. **KW** Corporate Taxes. Business Taxes. Taxes. Canada.

AB This paper analyzes the implications of alternative risk assumptions for estimates of the distorting effects of the corporate tax in Canada. These distortions are decomposed into three broad categories: inter-asset distortions; inter-industry distortions; and intertemporal distortions. Estimates of marginal effective corporate tax rates are used in a multi-asset general equilibrium model to evaluate the costs of the various distortions, with marginal effective tax rates calculated under alternative risk assumptions. Results indicate that assessments of the relative importance of these distortions are sensitive to alternative risk assumptions used in marginal tax rate calculations. The paper also explores the sensitivity of results to key elasticity parameters in the model.

Hardle, Wolfgang K.

PD April 1990. **TI** Kernel Regression Smoothing of Time Series. **AU** Hardle, Wolfgang K.; Vieu, Philippe. **AA** Hardle: Universite Catholique de Louvain. Vieu: Universite P. Sabatier, France. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9031; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 24. **PR** not available. **JE** C22, C14, C13, C51. **KW** Prediction. Time Series Analysis. Autoregression. Bandwidth. Kernel Method. Nonparametric Regression.

AB A class of nonparametric regression smoothers for time series is defined by the kernel method. The kernel approach allows flexible modeling of a time series without reference to a specific parametric class. The technique is applicable to detection of nonlinear dependencies in time series and to prediction in smooth regression models with serially correlated observations. In practice these estimators are to be tuned by a smoothing parameter. A data driven selector for this smoothing parameter is presented that asymptotically minimizes a squared error measure. We prove asymptotic optimality of this selector. We illustrate the technique with a simulated example and by constructing a smooth prediction curve for the variation of gold prices. In both cases, the nonparametric method proves to be useful in uncovering nonlinear structure.

PD June 1990. **TI** Smoothing by Weighted Averaging of Rounded Points. **AU** Hardle, Wolfgang K.; Scott, David W. **AA** Hardle: Universite Catholique de Louvain. Scott: Rice University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9040; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 26. **PR** not available. **JE** C14, C63, C13. **KW** Nonparametric Estimation. Nonparametric Regression. Confidence Levels. Algorithm.

AB Nonparametric smoothing techniques are generating much interest not only among theoretical statisticians but among applied workers in biostatistics, economics, and engineering. The benefits of this more flexible method come at the cost of greater computation. In higher dimensions, the computational burden can also be enormous when resampling methods for confidence intervals are used. One idea for reduction of computational cost is to do a data compression. In the case of multivariate density estimation, for example, the averaged shifted histogram is such a algorithm with significantly reduced computational effort. The ideas of the averaged shifted histogram algorithm can be extended to other nonparametric estimation problems such as regression and also to algorithms for additive modeling of high dimensional surfaces. In this paper the common framework for the so-called Weighted Averaging of Rounded Points is presented in these situations and examples are given.

PD June 1990. **TI** Bootstrap Confidence Bands. **AU** Hardle, Wolfgang K.; Nussbaum, Michael. **AA** Hardle: Universite Catholique de Louvain. Nussbaum: Karl-Weierstrass-Institut Akademie der Wissenschaften, Berlin. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9038; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 12. **PR** not available. **JE** C14, C13, C22. **KW** Nonparametric Regression. Bootstrap Method.

AB Bootstrap confidence bands are constructed for nonparametric regression. Resampling is based on a suitably

estimated residual distribution often called the Wild Bootstrap. The method is to construct first a fine grid of error bars with simultaneous coverage probability. Second the endpoints of these error bars are joined via polygon pieces or parabola using assumptions on the local curvature of the regression curve.

PD September 1990. **TI** A Bootstrap Test for Positive Definiteness of Income Effect Matrices. **AU** Hardle, Wolfgang K.; Hart, Jeffrey D. **AA** Hardle: Universite Catholique de Louvain. Hart: Texas A&M University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9053; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 16. **PR** not available. **JE** D12, C21, C51. **KW** Bootstrap. Central Limit Theorem. Kernel Estimation. Income Effect. Consumer Theory. Consumption.

AB Positive definiteness of income effect matrices provides a sufficient condition for the law of demand to hold. Given cross-section household expenditure data, empirical evidence for the law of demand can be obtained by estimating such matrices. Hardle, Hildenbrand and Jerison (1990) used the bootstrap method to simulate the distribution of the smallest eigenvalue of random matrices and to test their positive definiteness. Here, theoretical aspects of this bootstrap test of positive definiteness are considered. The asymptotic distribution of the smallest eigenvalue, of the matrix estimate is obtained. This theory applies generally to symmetric, asymptotically normal random matrices.

PD September 1990. **TI** Bootstrap Methods in Nonparametric Regression. **AU** Hardle, Wolfgang K.; Mammen E. **AA** Hardle: Universite Catholique de Louvain. Mammen: Universitat Heidelberg. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9049; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 14. **PR** not available. **JE** C14, C21, C51. **KW** Nonparametric Regression. Bootstrap Methods. Confidence Levels.

AB Bootstrap techniques are naturally arising in the setting of nonparametric regression when we consider questions of smoothing parameter selection or error bar construction. The bootstrap provides a simple way to implement alternatives to procedures based on asymptotic arguments. In this paper we give an overview over the various bootstrap techniques that have been used and proposed in nonparametric regression. The bootstrap has to be adapted to the models and questions one has in mind. An interesting variant that we consider more closely is called the Wild Bootstrap. This technique has been used for construction of confidence bands and for comparison with competing parametric models.

PD October 1990. **TI** How Many Terms should be Added into an Additive Model? **AU** Hardle, Wolfgang K.; Tsybakov A. B. **AA** Hardle: Universite Catholique de Louvain. Tsybakov: Academy of Sciences, USSR. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9068; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 24. **PR** not available. **JE** C14, C22, C51. **KW** Kernel Estimation. Bootstrap Method. Nonparametric Regression.

AB Smoothing in high dimensions faces the problem of data sparseness. Additive regression models alleviate this problem by fitting a sum of one-dimensional smooth functions. Given a set of predictor variables, some of these functions could actually be zero, so that a further simplification of high

dimensional smoothing occurs. A two-stage procedure is proposed here to decide how many and which components should be added into such an additive model. After a first step determining the number and sequence of components the model is fit by the kernel method. The asymptotic distribution of this regression estimate is given. A resampling procedure based on wild bootstrapping is proposed for computing p-values.

TI On Bootstrapping Kernel Spectral Estimates. **AU** Franke, J.; Hardle, Wolfgang K.

PD November 1990. **TI** Optimal Median Smoothing. **AU** Hardle, Wolfgang K.; Steiger, W. **AA** Hardle: Universite Catholique de Louvain. Steiger: Rutgers University. **SR** Universite Catholique de Louvain **CORE** Discussion Paper: 9070; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve **BELGIUM**. **PG** 19. **PR** not available. **JE** C63. **KW** Algorithm. Programming. Smoothing.

AB Median smoothing of a series of data values is considered. Naive programming of such an algorithm would result in a large amount of computation, especially when the series of data values is long. By maintaining a heap structure that we update when moving along the data we obtain an optimal median smoothing algorithm.

PD November 1990. **TI** Comparing Nonparametric versus Parametric Regression Fits. **AU** Hardle, Wolfgang K.; Mammen, E. **AA** Hardle: Universite Catholique de Louvain. Mammen: Ruprecht-Karls Universitat. **SR** Universite Catholique de Louvain **CORE** Discussion Paper: 9065; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve **BELGIUM**. **PG** 19. **PR** not available. **JE** C14, C13, C22, C51. **KW** Bootstrap Method. Nonparametric Regression. Consumer Expenditures. Consumption. Engel Curves.

AB In general, there will be visible differences between a parametric and a nonparametric curve. It is therefore quite natural to compare these in order to decide whether the parametric model could be justified. An asymptotic quantification is the distribution of the integrated squared difference between these curves. We show that the standard way of bootstrapping these statistic fails. We use and analyze a different form of bootstrapping for this task. We call this method the wild bootstrap and apply it to fitting Engel curves in expenditure data analysis.

Hare, Paul

PD April 1991. **TI** Privatization in Hungary, Poland and Czechoslovakia. **AU** Hare, Paul; Grosfeld, Irena. **AA** Hare: Heriot-Watt University. Grosfeld: DELTA, France. **SR** Centre for Economic Policy Research Discussion Paper: 544; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 71. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** L33, P52, O52. **KW** Europe. Privatization. Economic Reform. Private Ownership.

AB Several East European countries are embarking on major programs both to expand their private sectors by encouraging new firm formation, and to transfer much of the existing state sector into private ownership. This paper studies the early experience of Hungary, Poland and Czechoslovakia in these areas, and reviews in detail their privatization plans for three years 1991-3. All three countries envisage that about half the existing state sector will be in private hands by 1994 - an

extremely rapid rate of ownership change. While all countries will use a mixture of privatization methods, Hungary intends to sell its state firms, while the other two countries will also give away to the population a substantial fraction of the shares in the largest firms.

PD April 1991. **TI** Competitiveness and Industrial Restructuring in Czechoslovakia, Hungary and Poland. **AU** Hare, Paul; Hughes, Gordon. **AA** Hare: Heriot-Watt University, Edinburgh. Hughes: Edinburgh University. **SR** Centre for Economic Policy Research Discussion Paper: 543; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 59. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** O14, O19, O52, P52. **KW** Competitiveness. Prices.

AB Transition to the market in Eastern Europe will require a great deal of restructuring of production involving the contraction and even closure of certain branches and the expansion of others, including some new ones. In the course of this, many enterprises will have to be shut down. Unfortunately, even in the countries which have already undergone substantial price liberalization, there are still many distortions in the price system due to monopoly, remaining subsidies on production, and taxes related to trade (e.g. import duties). Consequently, evaluation of the profitability of firms or the branches in which they operate is likely to yield very misleading results if carried out at domestic prices. Accordingly, using detailed input-output data and information on world market prices for Czechoslovakia, Hungary and Poland, this paper seeks to recalculate value added for each branch in terms of world market prices.

Harkness, Jon

PD January 1991. **TI** Labour Force Participation by Canada's Disabled. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 802; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 31. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** J15, J24, J26, J21. **KW** Disability Insurance. Wages. Labor Supply.

AB Disability may influence an individual's work choice through its expected effects on earned income or on disability compensation or on consumption-leisure preferences. This paper deals with the work disincentives in disability insurance. It considers both males and females but no particular insurance scheme. Nevertheless, for various reasons, this study is most relevant to the Canada Pension Plan's disability program. A simple (and conventional) model of work-choice by the disabled is developed. In this model, an individual's work choice depends on his/her expected wage versus disability pension as well as on his/her taste for work, as determined by family structure, and on his/her other nonwage income.

Hart, Jeffrey D.

TI A Bootstrap Test for Positive Definiteness of Income Effect Matrices. **AU** Hardle, Wolfgang K.; Hart, Jeffrey D.

Hassett, Kevin

TI Recent U.S. Behavior and the Tax Reform Act of 1986: A Disaggregate View. **AU** Auerbach, Alan J.; Hassett, Kevin.

TI Tax Policy and Business Fixed Investment in the United States. **AU** Auerbach, Alan J.; Hassett, Kevin.

Heimler, Alberto

TI The Quality of Production of Textiles and Clothing and the Completion of the Internal Market. **AU** Faini, Riccardo; Heimler, Alberto.

Hendershott, Patric H.

PD January 1991. **TI** The Changing Fortunes of FHA's Mutual Mortgage Insurance Fund and the Legislative Response. **AU** Hendershott, Patric H.; Waddell, James A. **AA** Hendershott: Ohio State University. Waddell: Price Waterhouse. **SR** National Bureau of Economic Research Working Paper: 3592; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 18. **PR** \$2.00. **JE** G21, G28, H31, H11. **KW** Mortgages. Legislation. Federal Housing Administration. Housing. **AB** The 1980s was a bad decade for FHA's Mutual Mortgage Insurance (MMI) program, the mainstay of FHA's single family mortgage insurance. While the MMI Fund is required by statute to be actuarially sound, the Fund lost close to \$6 billion dollars, and its economic value declined from 5.3 percent of insurance-in-force to under one percent. This study documents the decline in the soundness of the MMI Fund in the 1980s and describes the legislation enacted in October 1990 to shore up the Fund.

Hendry, David F.

PD October 1990. **TI** Evaluating Dynamic Econometric Models by Encompassing the VAR. **AU** Hendry, David F.; Mizon, Grayham E. **AA** Hendry: Oxford University and University of California at San Diego. Mizon: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9011; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 22. **PR** no charge. **JE** C22, C52, C51. **KW** Time Series. VAR. Model Specification. **AB** A sequential modeling strategy is described for analyzing nonstationary time series with co-integrating relationships. Reducing a closed, congruent VAR to an open SEM requires mapping from I(1) to I(0), weak exogeneity and encompassing, to respectively validate inference, conditioning and simplification. Correct dynamic specification ensures an SEM parsimoniously encompasses the VAR, and entails it encompasses other SEMs. Recursive analysis of a VAR for money, prices, incomes and interest rates in the U.K. reveals its constancy. Co-integrating vectors for money demand and excess demand for goods are incorporated in an SEM which encompasses the VAR, clarifying earlier research.

Hercowitz, Zvi

PD February 1991. **TI** Migration with Fiscal Externalities. **AU** Hercowitz, Zvi; Pines, David. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 9-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 34. **PR** no charge. **JE** R11, R13, R23, R58. **KW** Population. Mobility. Regional Analysis. Migration. Externality. **AB** This paper analyzes the distribution of a country's population among regions when migration involves fiscal externalities. The main question addressed is whether a decentralized decision-making of regional governments can produce an optimal population distribution, as recently asserted, or a centralized intervention is indispensable, as argued before in the literature. In analyzing this issue it is

assumed that migration is costly and, accordingly, the problem is modeled in a dynamic setup. It turns out that, while with costless mobility the fiscal externality is fully internalized by voluntary interregional transfers, with costly mobility, centrally coordinated transfers still remain indispensable for efficient resource allocation.

Holm, Pasi

PD January 1991. **TI** A Monopoly Union Model of Wage Determination with Taxes and Endogenous Capital Stock: An Empirical Application to the Finnish Manufacturing Industry. **AU** Holm, Pasi; Honkapohja, Seppo; Koskela, Erkki. **AA** Holm and Honkapohja: University of Helsinki. Koskela: Bank of Finland. **SR** Centre for Economic Policy Research Discussion Paper: 506; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 38. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** J34, E22, G30, D21. **KW** Monopoly. Wage Determination. Unions. Investment. Manufacturing.

AB The paper formulates a model of wage determination in which the firm decides on employment after a monopoly union has determined wages. The novelty is to incorporate investment and capital decisions by firms. The subgame-perfect Nash equilibrium and its comparative statics for wages, capital stock and employment are characterized in various cases. The model is then estimated by using annual data from the Finnish manufacturing industry over the period 1960-87. The dynamic system of equations describing the determination of capital stock, wages and hours of work performs reasonably well; there are no obvious signs of misspecifications, coefficient estimates and other properties of the models are correct from the point of view of our theoretical reasoning.

Honkapohja, Seppo

TI A Monopoly Union Model of Wage Determination with Taxes and Endogenous Capital Stock: An Empirical Application to the Finnish Manufacturing Industry. **AU** Holm, Pasi; Honkapohja, Seppo; Koskela, Erkki.

Hoover, Kevin D.

PD March 1991. **TI** Mirowski's Scream: A Review of Philip Mirowski's "More Heat than Light: Economics as Social Physics, Physics as Nature's Economics." **AA** University of California at Davis. **SR** University of California at Davis Economics Department Working Paper: 382; Department of Economics, University of California at Davis, Davis, California 95616-8578. **PG** 23. **PR** no charge. **JE** A12, B22, B13, B31. **KW** Neoclassical Economics. Physics. Conservation Laws. Natural Sciences.

AB The paper is a light essay length review of Philip Mirowski's "More Heat Than Light: Economics as Social Physics, Physics as Nature's Economics." It argues that Mirowski's attack on the foundations of neoclassical economics is unwarranted by the evidence and that the methodological conclusion Mirowski draws are largely incorrect.

Horowitz, Joel L.

PD July 1988. **TI** A Simple Method for Testing a General Parametric Model against a Non-Nested Alternative. **AU** Horowitz, Joel L.; McAleer, Michael. **AA** Horowitz: University of Iowa. McAleer: Australian National University.

SR Australian National University Working Paper in Economics and Econometrics: 166; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 49. **PR** no charge. **JE** C15, C12. **KW** Likelihood Ratio Test. Monte Carlo Simulations. Small Sample Properties. Hypothesis Testing.

AB In this paper we develop a general, simple and highly tractable test, called the bounded-size likelihood ratio (BLR) test, of a general parametric model against a non-nested alternative. The BLR test can be applied easily to a wide variety of models, including nonlinear regression models; systems of seemingly unrelated regression equations; systems of simultaneous equations; truncated linear versus logarithmic regression models; models with qualitative, limited or latent dependent variables; separate distributional families of hypotheses; sample selection models; and models with unknown transformations of the dependent variable. The BLR test is completely consistent; the probabilities of Type I and Type II errors both approach zero as the sample size increases. Small sample corrections for the BLR test are easy to implement, and some Monte Carlo evidence suggests that they work well in finite samples.

Huffman, Gregory W.

TI Tax Analysis in a Real Business Cycle Model: On Measuring Harberger Triangles and Okun Gaps. **AU** Greenwood, Jeremy; Huffman, Gregory W.

Hughes, Gordon

TI Competitiveness and Industrial Restructuring in Czechoslovakia, Hungary and Poland. **AU** Hare, Paul; Hughes, Gordon.

Hughson, Eric

TI Noisy Signalling in Financial Markets. **AU** Bossaerts, Peter; Hughson, Eric.

Hunter, Linda

PD April 1991. **TI** Trade Liberalization in a Multinational-Dominated Industry: A Theoretical and Applied General-Equilibrium Analysis. **AU** Hunter, Linda; Markusen, James R.; Rutherford, Thomas F. **AA** Hunter: San Diego State University. Markusen: University of Colorado. Rutherford: University of Western Ontario. **SR** National Bureau of Economic Research Working Paper: 3679; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** \$2.00. **JE** F11, F23, F14, F13. **KW** Automobiles. Free Trade. Multinationals. Scale Economies. Imperfect Competition.

AB A theoretical model is developed and applied to the North American auto industry, motivated by the possibility of U.S.-Mexico free trade. Special features of the model include (1) significant scale economies at the plant level, (2) imperfect competition among firms, (3) joint ownership of plants and production coordination across plants by each firm, (4) an (initial) ability of firms to segment markets, (5) a separate treatment of non-resident firms in determining oligopolistic markups.

Imrohorglu, Ayse

PD January 1991. **TI** Seigniorage as a Tax: A Quantitative Evaluation. **AU** Imrohorglu, Ayse; Prescott, Edward C. **AA** Imrohorglu: University of Southern

California. Prescott: Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 132; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 27. **PR** no charge. **JE** E42, E52, E51. **KW** Taxes. Inflation. Seigniorage.

AB In this paper we analyze the efficacy of seigniorage as a tax associated with various monetary arrangements in a computable general equilibrium model. For the economies examined, we find that seigniorage tax is not a good one relative to a tax on labor income. If the after-tax real return is -5 percent, as it was in the 1974-1978 period, welfare is approximately 0.5 percent of consumption lower than it would be if the after-tax real return were zero.

Ingram, Beth

PD December 1990. **TI** Post Econometric Policy Evaluation: A Critique. **AU** Ingram, Beth; Leeper, Eric M. **AA** Ingram: University of Iowa. Leeper: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 393; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 27. **PR** no charge. **JE** E32, E61. **KW** Business Cycle. Lucas Critique. Policy Evaluation.

AB An increasingly popular approach to policy evaluation involves applying the parameters calibrated for a real business cycle model that does not include policy to a different model, where policy does affect private decision. This technique, in effect, estimates a model that misspecifies how private behavior depends on policy. The calibrated parameters depend on policy behavior, but calibrators overlook this dependence when projecting policy effects. This procedure repeats the "Keynesian" errors that Lucas (1976) noted in his influential critique of (then) standard methods of econometric policy evaluation and produces predictions of policy consequences that may be no more useful than ones from traditional econometric models.

Irwin, Douglas A.

PD December 1990. **TI** Mercantilism as Strategic Trade Policy: The Anglo-Dutch Rivalry for the East India Trade. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 392; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 45. **PR** no charge. **JE** N73, F13. **KW** Trade Policy. Mercantilism. Government Policy. Exports. International Trade.

AB This paper provides a reinterpretation of seventeenth-century mercantilist trade doctrine and policy in light of recent theories of strategic trade policy. Mercantilist economic thought, like strategic export-promotion theories, emphasized the use of government policy to capture rents that arise from imperfect competition in international trade. The economic structure of the Anglo-Dutch rivalry for the East India trade provides an excellent illustration of an environment in which the profit-shifting motive for strategic trade policies exists. Using data from the seventeenth-century East India trade, I find that the scope for strategic trade policies was clearly present, although the gains from such policies were probably quite small and are highly sensitive to assumptions about demand.

PD December 1990. **TI** Free Trade at Risk? An Historical

Perspective. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 391; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 14. **PR** no charge. **JE** F13. **KW** Free Trade. Protectionism. Infant Industries. Trade Policy. Tariffs.

AB The recent theoretical literature on strategic trade policy suggests that government intervention in international trade has the potential to be welfare-improving, thus bringing into question the traditional economic case for free trade. Economists in the nineteenth century also argued about whether theoretical justifications for tariffs compromised the case for free trade. This paper discusses two older debates somewhat related to the current focus on strategic industries and reciprocity, and concludes with an observation about how developments in economic theory affect economists' view of policy.

Isard, Peter

TI Externalities, Incentives and Failure to Achieve National Objectives in Decentralized Economies. **AU** Aizenman, Joshua; Isard, Peter.

Jackman, Richard

PD November 1990. **TI** Labor Market Policies and Unemployment in the OECD. **AU** Jackman, Richard; Pissarides, Christopher; Savouri, Savvas. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 11; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 78. **PR** no charge. **JE** J64, J63, J68. **KW** Unemployment. Vacancies. Labor Market Policy.

AB The massive increase in unemployment throughout the OECD since the early 1970s has led governments in many countries to introduce, or to expand, labor market policies such as training schemes, employment subsidies, public works or schemes of counseling or assistance in job search. Such programs have the objective of reducing unemployment by improving the workings of the labor market. This paper first briefly describes the types of programs that have been introduced in many OECD countries in recent years. It then suggests a model of the labor market, based on the relationship of unemployment and vacancies (or Beveridge curve), within which the rise in unemployment can be analyzed and the effects of policies and of institutions examined. Using this framework, we then identify the main factors causing shifts in unemployment and vacancy rates in 14 of the main OECD countries over the period 1970-88.

Jaditz, Ted

PD October 1990. **TI** Economic Markets and the Standard Industrial Classification. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 205; Bureau of Labor Statistics, 441 "G" Street N.W., Room 2126, Washington, D.C. 20212. **PG** 36. **PR** no charge. **JE** C81, C82, C43. **KW** Aggregation. Industry Classification. Prices.

AB In this paper, we address three basic issues. First, we consider whether the observed price variation within four digit industries is consistent with the common practice of empirical investigators to view four digit SIC codes as delineators of

economic markets. Second, we examine the aggregation structure of the SIC system. We consider whether the SIC system places products with similar price histories in the same three, two, and one digit classes. Finally, we consider an alternative classification scheme which places products with similar price histories in the same product class.

Jakeman, Anthony J.

TI Discrimination between Nested Two-and-Three-Parameter Distributions: An Application to Models of Air Pollution. **AU** Bai, Jun; Jakeman, Anthony J.; McAlcer, Michael.

Jenkins, Stephen

PD August 1988. **TI** The Measurement of Economic Inequality. **AA** University of Bath. **SR** Australian National University Working Paper in Economics and Econometrics: 170; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 55. **PR** no charge. **JE** D31, D63, C81. **KW** Income Distribution. Income.

AB This paper surveys the theoretical literature on income inequality measurement. It is directed at non-specialists, and to this end, the presentation is non-technical and formal proofs are eschewed. Section 2 discusses the issues arising when preparing income distribution for analysis: those concerning the definition of "income", of the income unit, and the time period over which income is defined. Sections 3 to 5 motivate and provide results on how to rank distributions in terms of their inequality and discuss a range of summary indices with reference to desirable properties such as the Principle of transfers, transfer Sensitivity, Symmetry, Mean-Independence, Population-Homogeneity and Decomposability. It is shown that indices from the Atkinson and Generalized Entropy family need to be given greater emphasis in empirical work than commonly used indices such as the Gini coefficient.

PD August 1988. **TI** Empirical Measurement of Horizontal Inequity. **AA** University of Bath. **SR** Australian National University Working Paper in Economics and Econometrics: 169; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 34. **PR** no charge. **JE** D31, D63. **KW** Inequality. Equity.

AB Horizontal inequity is the "unequal treatment of equals". A crucial problem arising when measuring its extent is: how should differential treatment which has some equity justification be distinguished from that which does not? The literature to date has suggested that "genuine" equals can be identified, and thence the problem solved, by adjusting incomes prior to calculations using equivalence scales. The paper argues that there are some good reasons for considering an alternative approach (labeled "partial symmetry"). In this, the emphasis is on measuring horizontal inequity within each group of households with the same equity-relevant characteristics, rather than on adjusting incomes and then using the same measure for all households in the population. The approaches are compared theoretically with reference to summary indices based on the Generalized Entropy family, and to the conditions required to make partial orderings of different redistributions.

Jones, D.

TI Labor Managed vs. Private Firms: An Empirical Comparison of Cooperatives and Private Firms in Central Italy.

AU Bartlett, W.; Cable, J.; Estrin, S.; Jones, D.; Smith, S.

Joshi, Heather

TI The Foregone Earnings of Europe's Mothers.
AU Davies, Hugh; Joshi, Heather.

Jovanovic, Boyan

TI Was the Great Depression a Low-Level Equilibrium?
AU Dagsvik, John; Jovanovic, Boyan.

Jullien, Bruno

TI Dynamic Duopoly with Learning through Market Experimentation. AU Aghion, Philippe; Espinoza, Maria Paz; Jullien, Bruno.

TI On Precommitment Effects between Competing Agencies. AU Caillaud, Bernard; Jullien, Bruno; Picard, Pierre.

Kalai, Ehud

TI Complexity Considerations and Market Behavior.
AU Fershtman, Chaim; Kalai, Ehud.

Kalirajan, K. P.

PD August 1988. TI Entrepreneurship in Agriculture: A Myth or Reality in Developing Countries. AA Australian National University. SR Australian National University Working Paper in Economics and Econometrics: 171; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. PG 27. PR no charge. JE O13, O12, Q12. KW Entrepreneurship. Agriculture. Economic Development. India.

AB This paper distinguishes entrepreneurship from management and provides a method to measure the entrepreneurial ability in agriculture. The workability of the theoretical model is tested empirically with data from the Indian agriculture. The results show that entrepreneurship is not a missing factor in the development of the agricultural sector in India. The sample farmers appear to have significant but varied levels of entrepreneurial talents. This study also identifies the factors causing such variations in entrepreneurial abilities among sample participants.

Kanbur, Ravi

PD November 1990. TI Optimal Non-Linear Income Taxation for the Alleviation of Income Poverty. AU Kanbur, Ravi; Keen, Michael; Tuomala, Matti. AA Kanbur: University of Warwick and World Bank. Keen: University of Essex and Queen's University. Tuomala: University of Jyväskylä. SR Institute for Fiscal Studies (IFS) Working Paper: W91/2; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, ENGLAND. PG 24. PR 3 pounds. JE H21, H24, I32. KW Income Taxation. Taxes. Poverty.

AB This paper is concerned with the optimal use of income information in the design of tax/transfer systems to alleviate poverty. The issue is one of optimal nonlinear income taxation, but using a non-welfarist objective function that seems to accord well with the common concerns of policy debate: an income-based poverty index. We show that one of the key results of the welfarist literature is overturned: if it is desirable for everybody to work, the optimal marginal tax rate on the very poorest individuals is strictly negative. More generally, it

is argued that the non-welfarist perspective points towards lower marginal tax rates in the lower part of the distribution than does the welfarist. Numerical simulations suggest, however, that this effect is of limited quantitative significance. Using conventional functional forms and parameter values, optimal marginal tax rates on the poor are in the 60-70% range.

Kandel, Shmuel

PD February 1991. TI Asset Returns and Intertemporal Preferences. AU Kandel, Shmuel; Stambaugh, Robert F. AA Kandel: Tel Aviv University. Stambaugh: University of Pennsylvania and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 3633; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 42. PR \$2.00. JE G12, G11. KW Asset Returns. Investment. Risk Aversion. Interest Rates.

AB A representative agent model with time-varying moments of consumption growth is used to analyze implications about means and volatilities of asset returns as well as the predictability of asset returns for various investment horizons. A comparative statics analysis using non-expected utility preferences indicates that, although risk aversion is important in determining the means of both equity returns and interest rates, implications about the volatility and the predictability of equity returns are affected primarily by intertemporal substitution. Lower elasticities of intertemporal substitution are associated with greater variance in the temporary component of equity prices.

Kane, Alex

TI Measuring Risk Aversion from Excess Returns on a Stock Index. AU Chou, Ray; Engle, Robert F.; Kane, Alex.

Kaplan, Steven

PD March 1991. TI The Staying Power of Leveraged Buyouts. AA University of Chicago. SR National Bureau of Economic Research Working Paper: 3635; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 44. PR \$2.00. JE G34, G32. KW Corporations. Public Ownership. Buyouts.

AB This paper documents the organizational status over time of 183 large leveraged buyouts (LBOs) completed between 1979 and 1986. As of August 1990, 63% of the LBOs are privately owned, 14% are independent public companies, and 23% are owned by other public companies. As time since the LBO increases, the percentage of LBOs that have returned to public ownership increases. The (unconditional) median time LBOs remain private equals 6.70 years. This evidence suggests that the majority of LBO organizations are neither short-lived nor permanent. In addition, the moderate fraction of LBOs assets owned by other (potentially related) companies implies that asset sales play a role in, but are not the primary force motivating LBO transactions.

PD May 1991. TI The Evolution of Buyout Pricing and Financial Structure. AU Kaplan, Steven; Stein, Jeremy C. AA Kaplan: University of Chicago. Stein: Massachusetts Institute of Technology. SR National Bureau of Economic Research Working Paper: 3695; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 38. PR \$2.00. JE G34, G32. KW Takeovers. Buyouts. Mergers. Corporate Finance.

AB This paper presents evidence on systematic changes in

the pricing and financial structure of 124 large management buyouts completed between 1980 and 1989. We find that over time: (1) prices increased relative to current cash flows with no accompanying decrease in risk or increase in projected future cash flows; (2) required bank principal repayments accelerated, leading to sharply lower ratios of cash flow to total debt obligations; (3) private subordinated debt was replaced by public debt while the use of strip-financing techniques declined; and (4) management teams invested a smaller fraction of their net worth in post-buyout equity.

Karimov, Il'dar

TI Internal Currency Markets and Production in the Soviet Union. **AU** Goldberg, Linda S.; Karimov, Il'dar.

Karni, Edi

PD February 1991. **TI** Utility Theory with Probability-Dependent Outcome Valuation. **AA** Johns Hopkins University. **SR** Johns Hopkins Department of Political Economy Working Paper: 262; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 20. **PR** no charge. **JE** D81, D11, D84. **KW** Utility Theory. Risk. Expected Utility.

AB This paper provides an axiomatic characterization of a class of nonexpected utility models of decision-making under risk. It formalizes the notion that the valuation of outcomes may depend on the probability measure in whose support the outcomes are contained and defines a transformation of the space of risky prospects taking account of these probability dependent valuations. The von-Neumann-Morgenstern axioms are imposed on the preference relation among the transformed risky prospects to obtain a preference representation that is nonlinear in the probabilities. Some implications of the resulting models are pointed out using local expected utility analysis.

PD March 1991. **TI** Subjective Probabilities and Utility with Event-Dependent Preferences. **AA** Johns Hopkins University. **SR** Johns Hopkins Department of Political Economy Working Paper: 263; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 30. **PR** no charge. **JE** D11, D84, D81. **KW** Subjective Probabilities. Utility Theory. State-Dependent Preferences.

AB This paper generalizes Savage's subjective expected utility theory to allow for event-dependent preferences. The approach involves weakening of Savage's postulates that require ordinal and cardinal state-independence and introduces a new axiom that identifies equivalent outcomes across events. The result is an expected utility representation of preferences with event-dependent utility function with respect to a unique subjective probability measure on the algebra of all events.

Kashyap, Anil K.

PD March 1991. **TI** Monetary Policy and Credit Conditions: Evidence from the Composition of External Finance. **AU** Kashyap, Anil K.; Stein, Jeremy C.; Wilcox, David W. **AA** Kashyap and Wilcox: Board of Governors of the Federal Reserve System. Stein: Massachusetts Institute of Technology. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 154; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 47. **PR** no charge. **JE** E52, G21, E51. **KW** Monetary Policy. Credit.

Commercial Paper. Banking. Loans. Commercial Banks.

AB In this paper we use the relative movements in bank loans and commercial paper to provide evidence on the existence of a credit supply of channel of monetary policy transmission. A first necessary condition for monetary policy to work through a credit channel is that banks must view loans and securities as imperfect substitutes, so that monetary tightening does affect the availability of bank loans. We find that tighter monetary policy leads to a shift in a firms' mix of external financing -- commercial paper issuance rises while bank loans fall, suggesting that loan supply has indeed been reduced. Furthermore, these shifts in the financing mix seem to affect investment (even controlling for interest rates). This implies that bank and non-bank sources of finance are also not perfect substitutes for businesses. We also argue that this view of the transmission mechanism can help explain why interest rate spreads involving commercial paper rates have had considerable predictive power for many measures of economic activity.

Katz, Lawrence F.

PD March 1991. **TI** Changes in the Structure of Wages in the Public and Private Sectors. **AU** Katz, Lawrence F.; Krueger, Alan B. **AA** Katz: Harvard University. Krueger: Princeton University. **SR** National Bureau of Economic Research Working Paper: 3667; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** \$2.00. **JE** J45, J31. **KW** Public Sector. Wages. Wage Differentials. Education. Wage Premium.

AB The wage structure in the U.S. public sector responded sluggishly to substantial changes in private sector wages during the 1970s and 1980s. Despite a large expansion in the college/high school wage differential during the 1980s in the private sector, the public sector college wage premium remained fairly stable. Although wage differentials by skill in the public sector were fairly unresponsive to changes in the private sector, overall pay levels for state and local government workers were quite sensitive to local labor market conditions. But federal government regional pay levels appear unaffected by local economic conditions.

PD March 1991. **TI** The Effect of the New Minimum Wage Law in a Low-Wage Labor Market. **AU** Katz, Lawrence F.; Krueger, Alan B. **AA** Katz: Harvard University. Krueger: Princeton University. **SR** National Bureau of Economic Research Working Paper: 3655; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 13. **PR** \$2.00. **JE** J38, J31. **KW** Wages. Legislation. Minimum Wage. Government Policy. Wage Structure.

AB After nearly a decade without change, legislation that affected the Federal minimum wage in two significant ways took effect on April 1, 1990: (1) the hourly minimum wage was increased from \$3.35 to \$3.80; and (2) employers were enabled to pay a subminimum wage to teenage workers for up to six months. This paper examines the effect of these changes in the minimum wage law in a low wage labor market using data from a survey of 167 fast food restaurants in Texas. We draw three main conclusions. First, our survey results indicate that less than 2 percent of fast food restaurants have taken advantage of the youth subminimum, even though 73 percent of the sampled restaurants paid a starting wage of less than \$3.80 before the new minimum wage took effect. Second, we find that a sizable minority of fast food restaurants increased wages for workers

by an amount exceeding that necessary to comply with the higher minimum wage. Third, the majority of fast food restaurants in Texas that were directly affected by the minimum wage increase did not report that they attempted to offset their mandated wage increase by cutting fringe benefits or reducing employment.

Keen, Michael

TI Optimal Non-Linear Income Taxation for the Alleviation of Income Poverty. **AU** Kanbur, Ravi; Keen, Michael; Tuomala, Matti.

Kehoe, Patrick J.

TI Reputation with Multiple Relationships: Reviving Reputation Models of Debt. **AU** Cole, Harold L.; Kehoe, Patrick J.

Kendall, Jon D.

TI Exchange Rate Volatility and International Prices. **AU** Feenstra, Robert C.; Kendall, Jon D.

TI Exchange Rate Volatility and International Prices. **AU** Feenstra, Robert C.; Kendall, Jon D.

Kenen, Peter B.

TI On the Need to Allow for the Possibility that Governments Mean What They Say: Interpreting the Target-Zone Model of Exchange-Rate Behavior in the Light of EMS Experience. **AU** Dominguez, Kathryn M.; Kenen, Peter B.

Kidd, Michael P.

TI Occupational Access and Wage Discrimination. **AU** Dolton, Peter J.; Kidd, Michael P.

Kimball, Miles S.

PD January 1991. **TI** Precautionary Motives for Holding Assets. **AA** University of Michigan. **SR** National Bureau of Economic Research Working Paper: 3586; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 8. **PR** \$2.00. **JE** D31, E21, E41, D81. **KW** Savings. Risk. Wealth. Liquidity. Money Demand.

AB At least three types of precautionary motives are directly relevant to an agent's demand for assets. (I.) The precautionary saving motive, or prudence, can cause an agent to respond to a risk by accumulating more wealth. (II.) The desire to moderate total exposure to risk, or temperance, can cause an agent to respond to an unavoidable risk by reducing exposure to other risks even when the other risks are statistically independent of the first. (III.) The precautionary demand for liquidity can cause an agent to respond to a risk by holding more money.

Kitson, Michael

PD November 1990. **TI** Bilateralism in the Interwar World Economy. **AU** Kitson, Michael; Solomou, Solomos. **AA** University of Cambridge. **SR** University of Cambridge DAE Working Paper: 9101; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 14. **PR** \$4.00 (2.00 pounds) checks payable to University of Cambridge. **JE** F13, F14, O57. **KW** Bilateralism. Trade Relations. Trade Policy. Protectionism. **AB** The trends in bilateralism during the interwar period are

examined for a sample of ten countries and the world economy as represented by the sum of these countries, comprising 65 per cent of world trade. The findings show that, with the exception of Germany between 1934-38, the level of bilateralism fluctuated but did not see a significant trend increase in the period of protectionism during the 1930s.

Klein, Michael W.

PD April 1991. **TI** Learning about Intervention Target Zones. **AU** Klein, Michael W.; Lewis, Karen K. **AA** Klein: Clark University. Lewis: University of Pennsylvania, New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3674; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** \$2.00. **JE** F31, E42, E52. **KW** Exchange Rates. Government Intervention. Monetary Policy.

AB This paper provides a framework for evaluating how market participants' beliefs about foreign exchange target zones change as they learn about central bank intervention policy. In order to examine this behavior, we first generalize the standard target zone model to allow for intra-marginal intervention. Intra-marginal intervention implies that the position of market participants' beliefs about the target zone can be determined from their beliefs about the likelihood of intervention. As an application of this model, we estimate a probability of intervention model using daily exchange rates and market observations of central bank interventions following the Louvre Accord. Interestingly, even over this relatively stable Louvre Accord period, we find that the market's views of intervention target zones would have varied quite a bit over time.

Kletzer, Kenneth M.

TI Persistent Differences in National Productivity Growth Rates with Common Technology and Free Capital Mobility: The Roles of Private Thrift, Public Debt, Capital Taxation and Policy towards Human Capital Formation. **AU** Buiter, Willem H.; Kletzer, Kenneth M.

Knetter, Michael M.

TI Pricing to Market in International Trade: Evidence from Panel Data on Automobiles and Total Merchandise. **AU** Gagnon, Joseph E.; Knetter, Michael M.

Kokoski, Mary F.

TI Comparing Prices across Cities: A Hedonic Approach. **AU** Primont, Diane F.; Kokoski, Mary F.

TI Differences in Food Prices across U.S. Cities: Evidence from CPI Data. **AU** Primont, Diane F.; Kokoski, Mary F.

Kon-Ya, Fumiko

TI Speculative Behavior on the Stock Markets: Evidence from the United States and Japan. **AU** Shiller, Robert J.; Kon-Ya, Fumiko; Tsutsui, Yoshiro.

Koskela, Erkki

TI A Monopoly Union Model of Wage Determination with Taxes and Endogenous Capital Stock: An Empirical Application to the Finnish Manufacturing Industry. **AU** Holm, Pasi; Honkapohja, Seppo; Koskela, Erkki.

Kotlikoff, Laurence J.

PD January 1991. **TI** How Regional Differences in Taxes and Public Goods Distort Life Cycle Location Choices. **AU** Kotlikoff, Laurence J.; Raffelhueschen, Bernd. **AA** Kotlikoff: Boston University. Raffelhueschen: Christian-Albrechts Universitat. **SR** National Bureau of Economic Research Working Paper: 3598; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 58. **PR** \$2.00. **JE** R11, R12, R23. **KW** Public Goods. Taxes. Regional Economies. Households. Migration.

AB Locational choice is one of the fundamental exercises of consumer sovereignty. When regions (or localities within regions) specify different tax rates or supply different amounts of public goods, they distort individuals' location choices. This paper models and measures for the U.S. and New England the location distortion arising from interregional differences in taxation and supplies of public goods. In our overlapping generations model agents, at each point in their lifespan, choose where to locate taking into account their locational preferences, each region's wage, consumption, and personal capital income taxes, and each region's supply of public goods. The findings suggest that regional fiscal differences play an important role in the location choices of three to four percent of Americans.

TI Generational Accounts - A Meaningful Alternative to Deficit Accounting. **AU** Auerbach, Alan J.; Gokhale, Jagadeesh; Kotlikoff, Laurence J.

Kremp, Elizabeth

PD March 1991. **TI** Dispersion and Heterogeneity of Firm Performances in Nine French Service Industries, 1984-1987. **AU** Kremp, Elizabeth; Mairesse, Jacques. **AA** Kremp: National Bureau of Economic Research. Mairesse: Institut National de la Statistique, France and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3665; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 33. **PR** \$2.00. **JE** L80, L16, L11. **KW** Service Sector. Profits. Productivity.

AB In the present study, we have taken advantage of the wealth of information provided by the French annual survey of market services, to construct a panel sample of data on about 2300 large firms, from 1984 to 1987, in nine selected service industries (at the four digit level of the industrial classification). We have contrasted the average performances of firms across industries, in terms of labor productivity ratios and profitability margins, both in levels and in growth rates. We, then proceeded to show that the differences across industries in average productivity and profitability are usually small when compared to the range of individual differences within industries, and have investigated to what extent the extreme variability in individual performances could be accounted for by other heterogeneity factors, besides the industry effects.

Krishna, Kala

PD April 1991. **TI** Rent Sharing in the Multi-Fibre Arrangement: Theory and Evidence from U.S. Apparel Imports from Hong Kong. **AU** Krishna, Kala; Erzan, Refik; Tan, Ling Hui. **AA** Krishna: Harvard University and National Bureau of Economic Research. Erzan: World Bank. Tan: Harvard University. **SR** National Bureau of Economic Research Working Paper: 3673; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** \$2.00. **JE** F14, F13, O53. **KW** Quotas. Tariffs.

Developing Countries.

AB Available estimates of tariff equivalents of quotas and welfare calculations on the costs of MFA quotas for developing countries are based on the premise of perfect competition in both product and license markets. It is also assumed that the exporting countries which administer the MFA quotas receive all the scarcity rent. We argue that in the presence of market power on the buyers' side in the product market combined with concentration in the license markets, the importing countries may retain part of this rent, i.e. share it with the exporters.

Krueger, Alan B.

TI Changes in the Structure of Wages in the Public and Private Sectors. **AU** Katz, Lawrence F.; Krueger, Alan B.

TI The Effect of the New Minimum Wage Law in a Low-Wage Labor Market. **AU** Katz, Lawrence F.; Krueger, Alan B.

PD May 1991. **TI** The Effect of Social Security on Labor Supply: A Cohort Analysis of the Notch Generation. **AU** Krueger, Alan B.; Pischke, Jorn-Steffen. **AA** Krueger: Princeton University and National Bureau of Economic Research. Pischke: Princeton University. **SR** National Bureau of Economic Research Working Paper: 3699; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** \$2.00. **JE** H55, J14, J22, J11. **KW** Social Security. Retirement. Labor Supply. Elderly.

AB This paper uses aggregate birth year/calendar year level data derived from the Current Population Survey (CPS) to estimate the effect of Social Security wealth on the labor supply of older men in the 1970s and 1980s. The analysis focuses on the 1977 amendments to the Social Security Act, which created a substantial, unanticipated differential in benefits for otherwise identical individuals depending on whether they were born before or after 1917. This differential has become known as the benefit notch. There are two principal differences between the present analysis and the previous literature. First, this paper uses time series variations in benefit levels to estimate the relationship between benefits and labor supply in an era when real benefits were falling for new recipients. Second, variation in benefit levels across cohorts is used to estimate the relationship between benefits and labor supply.

Krueger, Anne O.

PD December 1990. **TI** Theory and Practice of Commercial Policy: 1945-1990. **AA** Duke University. **SR** National Bureau of Economic Research Working Paper: 3569; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** \$2.00. **JE** F13, F14. **KW** Protectionism. Trade Policy. Commercial Policy. Developing Countries.

AB In this paper, the evolution of thought regarding protectionist trade policies in developed and in developing countries is examined and contrasted. In the developing countries distrust of markets and a belief in the infant industry argument led to highly protectionist trade regimes. The consequences were so negative that thinking about interventions has changed markedly. The lessons from this experience for the policy implications of the "new trade theory" are then examined.

Krugman, Paul

PD January 1991. **TI** Cities in Space: Three Simple Models. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 3607; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 16. **PR** \$2.00. **JE** R11, R12, R13. **KW** Urban Economics. Urbanization. Regional Economics.

AB Urban agglomerations arise at least in part out of the interaction between economies of scale in production and market size effects. This paper develops a simple spatial framework to develop illustrative models of the determinants of urban location, of the number and size of cities, and of the degree of urbanization. A central theme is the probable existence of multiple equilibria, and the dependence of the range of potential outcomes on a few key parameters.

Kydland, Finn E.

PD November 1990. **TI** The Econometrics of the General Equilibrium Approach to Business Cycles. **AU** Kydland, Finn E.; Prescott, Edward C. **AA** Kydland: Carnegie-Mellon University. Prescott: Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 130; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 29. **PR** no charge. **JE** E32, D58, C82. **KW** Business Cycle. General Equilibrium Model. National Income Accounting.

AB In this paper, we review the development of econometric business cycle theory, with particular emphasis on the general equilibrium approach (which was developed later). Crucial to this development was the systematic reporting of national income and product accounts, along with time series of aggregate inputs and outputs of the business sector. Section 1 is a review of this important development in factual studies. In Section 2 we review what we call the system-of-equations approach to business cycle theory. With this approach, a theory of the business cycle is a system of dynamic equations which have been measured using the tools of statistics. Section 3 is a review of the general equilibrium approach to business cycle theory. General equilibrium models have people or agents who have preferences and technologies, and who use some allocation mechanism.

Lakonishok, Josef

PD February 1991. **TI** Window Dressing by Pension Fund Managers. **AU** Lakonishok, Josef; Shleifer, Andrei; Thaler, Richard; Vishny, Robert W. **AA** Lakonishok: University of Illinois. Shleifer: Harvard University. Thaler: Cornell University. Vishny: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 3617; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 14. **PR** \$2.00. **JE** G23, G11, M21. **KW** Pensions. Portfolio Choice.

AB This paper takes a first look at investment strategies of managers of 769 pension funds, with total assets of \$129 billion at the end of 1989. The data show that managers of these funds tend to oversell stocks that have performed poorly. Relative sales of losers accelerate in the fourth quarter, when funds' portfolios are closely examined by the sponsors. This result supports the view that fund managers "window dress" their portfolios to impress sponsors and suggests that managers are

evaluated on their individual stock selections and not just aggregate portfolio performance.

LaLonde, Robert J.

PD December 1990. **TI** The Assimilation of Immigrants in the U.S. Labor Market. **AU** LaLonde, Robert J.; Topel, Robert, H. **AA** University of Chicago. **SR** National Bureau of Economic Research Working Paper: 3573; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** \$2.00. **JE** J61, J31, J24, F22. **KW** Immigrants. Wages. Human Capital.

AB This paper reassesses the evidence on the assimilation and the changing labor market skills of immigrants to the United States. We find strong evidence of labor market assimilation for most immigrant groups. For Asian and Mexican immigrants the first ten years of experience in the United States increases earnings by more than 20 percent. Further, this estimate may understate the actual rate of assimilation because of the sharp decline in the relative wages of unskilled U.S. workers. We also find little evidence of declining immigrant "quality" within ethnic groups. The diminished labor market skills of new immigrants result entirely from changes in the immigrants' countries of origin.

Lambert, Peter J.

PD October 1990. **TI** Redistribution through the Income Tax, or: Robin Hood and the Groves of the Forest. **AA** University of York and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/13; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, ENGLAND. **PG** 18. **PR** 3 pounds. **JE** H24, H21, D31. **KW** Taxes. Income Distribution. Income Tax.

AB Empirical analysis reveals that, typically, the impact effect of the personal income tax is unambiguously to reduce inequality in the distribution of money income. This would be explained by theory, were it the case that all income units were taxed according to the same progressive schedule. However, in the real world, income taxes differentiate between income units also on the basis of non-income attributes, and these may be equity-relevant. Hence, not only do we lack an explanation for the observed inequality reduction, but also its normative significance is unclear. In this paper, we view the operation of the typical real-world income tax as equivalent to the imposition of a proportional (distributionally neutral) tax, followed by "Robin Hood activity", appropriately defined.

PD January 1991. **TI** Redistribution through the Income Tax, II: The Effect on Equivalent Incomes. **AA** University of York and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W91/3; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, ENGLAND. **PG** 24. **PR** 3 pounds. **JE** H23, H24, D31. **KW** Income Tax. Equivalence Scale. Redistribution. Taxes.

AB There is evidence that income taxation has an inequality-reducing effect on the distribution of equivalent income. This would be explained by theory, were it the case that all income units were taxed on their equivalent incomes according to a common progressive schedule. But this is not so: our money income taxes are typically not designed in coherence with the equivalence scale methodology. Thus we lack a theoretical explanation for the observed finding. Furthermore, its normative significance is unclear. In this paper we seek to explain the observed inequality reduction, and we

also examine its significance in social welfare terms. Our analysis points to a normative limitation of the increasingly popular use of the equivalent income methodology to gauge distributional effects.

Landesmann, Michael

TI Industrial Restructuring and the Reorientation of Trade in Czechoslovakia, Hungary, and Poland. **AU** Szekely, Istvan; Landesmann, Michael.

Laskar, Daniel

PD March 1990. **TI** European Monetary Union: Could it be Less Inflationary than a Deutsche-Mark Zone? **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9013; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 24. **PR** 20 F. **JE** E58, E42, E31, E52. **KW** European Monetary Union. Exchange Rate. Central Bank. Inflation.

AB We develop the argument that inflation could be both lower and less variable in a symmetric fixed exchange rate system (a European Monetary Union) than in an asymmetric one (a Deutsche-Mark zone). The analysis relies on the assumption that central banks are independent, in the sense that they do not necessarily share the corresponding social preferences. We show that in the symmetric system the central bank should care more about inflation than in the asymmetric one. We also discuss our result by giving some formal content to existing fears that, on the contrary, a European Monetary Union would be more inflationary. The welfare implications of our analysis are also considered.

Ledyard, John O.

PD March 1990. **TI** On the Optimality of Lottery Drafts: Characterization of Interim Efficiency in a Public Goods Problem. **AA** California Institute for Technology. **SR** Caltech Social Science Working Paper: 717; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 35. **PR** no charge. **JE** H42, H41, D61. **KW** Public Goods. Mechanism Design. Social Welfare. Auctions. Lotteries.

AB This paper characterizes interim efficient mechanisms for public good production in an environment with risk neutral, quasi-linear preferences and fixed size projects, where the distribution of the private good, as well as the public goods decision, affects social welfare. We find that over a wide range of parameters the optimal mechanism is a lottery draft, where all private information is ignored by the planner. The technical conditions for this result are related to regularity conditions often encountered in the optimal auction literature. These lottery drafts have only a limited form of distortion in the output of the public good, but severe distortions in the distribution of the private good. When the regularity condition does not hold, the nature of the distortion reverses: there is underprovision of the public good, but this lower level of public good is provided in a more cost efficient way. The paper also explores the effects of limited side payments, consumption lower bounds, individual rationality, and large populations.

Lee, John H. H.

PD March 1991. **TI** A Lagrange Multiplier Test for GARCH Models. **AA** Monash University. **SR** Monash Department of Econometrics Working Paper: 3/91; Department of Econometrics, Monash University, Clayton, Victoria 3168,

AUSTRALIA. **PG** 11. **PR** no charge. **JE** C12, C22, C52. **KW** Lagrange Multiplier Test. Linear Regression Model. GARCH. Information Matrix.

AB This paper extends the Lagrange Multiplier (LM) test to testing white noise disturbances against GARCH disturbances in the linear regression model. The resulting LM test for the GARCH alternative is identical to the LM test for an ARCH alternative.

Lee, K. C.

TI Persistence, Cointegration and Aggregation: A Disaggregated Analysis of Output Fluctuations in the U.S. Economy. **AU** Pesaran, M. Hashem; Pierse, R. G.; Lee, K. C.

Leeper, Eric M.

TI Post Econometric Policy Evaluation: A Critique. **AU** Ingram, Beth; Leeper, Eric M.

Lefebvre, Olivier

TI Bank Loans Securitization with Asymmetric Information: A Principal-Agent Solution. **AU** Barham, Vicky; Lefebvre, Olivier.

Lefevre, Francoise

PD June 1990. **TI** The Shapley Value of a Walrasian Perfectly Competitive Market may fail to Exist. **AA** not available. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9037; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 23. **PR** not available. **JE** D51, D61, C62. **KW** Exchange Economies. Equilibrium Allocation. General Equilibrium Model. Walrasian Equilibrium.

AB A counterexample for the existence of the Shapley value of non-differentiable perfectly competitive Walrasian (i.e., pure exchange) economies is given. The model used is that of a non-atomic continuum of traders. The appropriate - and most powerful - value in the non-differentiable case, introduced by Mertens (1988a) is considered; the existence and unicity of this value for monetary (i.e., transferable utility) markets was established by Mertens (1988b), without any differentiability assumption. Moreover, we show in fact that, for any concave utility representation of this economy, the corresponding side-payment game has an asymptotic value which involves a non-zero transfer.

Lehmann, Bruce N.

PD April 1991. **TI** Notes on Dynamic Factor Pricing Models. **AA** Columbia University. **SR** National Bureau of Economic Research Working Paper: 3677; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** \$2.00. **JE** G12. **KW** Asset Pricing. Stock Market. Arbitrage. Risk. Common Factor.

AB These notes discuss three aspects of dynamic factor pricing (i.e., APT) models. The first one is that diversifiable idiosyncratic risk is unpredictable in a no-arbitrage world. The second feature is that the conditional factor loadings or betas on the common factors are approximately constant when returns follow an unconditional factor structure. The third topic concerns the estimation of dynamic factor pricing models in large cross-sections when returns follow an unconditional factor structure. These results aid in the interpretation of existing applications and identify some of the issues in the formulation and estimation of dynamic factor pricing models.

PD April 1991. **TI** Earnings, Dividend Policy, and Present Value Relations: Building Blocks of Dividend Policy Invariant Cash Flows. **AA** Columbia University. **SR** National Bureau of Economic Research Working Paper: 3676; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** \$2.00. **JE** G12, G31, G35. **KW** Asset Pricing. Dividends.

AB In a Modigliani-Miller world, price equals the risk-adjusted present value of future dividends and dividend policy is irrelevant for asset pricing. This paper searches for cash flows with two characteristics: asset prices can be calculated from their present values and they are invariant with respect to dividend policy. Residual income measures with these features are identified under two assumptions: dividend policy does not alter risk premiums and income earned from investments associated with dividend policy includes capital gains and losses. These results hold for otherwise arbitrary risk premiums in the general no-arbitrage approach to the valuation of uncertain income streams.

Leiderman, Leonardo

TI Seigniorage and the Welfare Cost of Inflation: Evidence from an Intertemporal Model of Money and Consumption. **AU** Eckstein, Zvi; Leiderman, Leonardo.

Leon, H. L.

TI Testing for Heterogeneous Parameters in Least Squares Approximations. **AU** Dutta, J.; Leon, H. L.

Levich, Richard M.

TI International Accounting Diversity: Does it Impact Market Participants? **AU** Choi, Frederick D. S.; Levich, Richard M.

Levine, Paul

PD March 1991. **TI** Should Rules be Simple? **AA** University of Leicester. **SR** Centre for Economic Policy Research Discussion Paper: 515; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 41. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** E61, D83, D84. **KW** Credibility. Learning. Rational Expectations. Government Policy. Incomplete Information.

AB The principal argument of the paper is that in an incomplete information setting, where the private sector lacks information on government objectives and has to learn about the policy rule by direct observation and estimation, simple "sub-optimal" rules may outperform the more complicated rule that is optimal under complete information. This result is demonstrated by simulations using an overlapping contract rational expectations model. The paper thus provides some formal reasoning to support arguments for simplicity associated with credibility and the need for the private sector to be able to monitor policy.

Levinsohn, James

PD March 1991. **TI** Testing the Imports-as-Market-Discipline Hypothesis. **AA** Stanford University. **SR** National Bureau of Economic Research Working Paper: 3657; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** \$2.00. **JE** L60, L13, L11. **KW** Imports. Oligopoly.

Manufacturing. Trade Policy. Prices.

AB It has long been believed that international competition forces domestic firms to behave more competitively. I term this the imports-as-market-discipline hypothesis. I construct a simple static oligopoly model and estimate the model using panel data from Turkish manufacturing firms. The data span the course of a dramatic trade liberalization. Looking for changes in price-marginal cost markups as trade policy shifts, I test the imports-as-market discipline hypothesis. In all five industries to which the hypothesis is relevant, markups change in the direction predicted by the theory. These changes are statistically significant in all but one of the five industries.

Lewis, Karen K.

PD January 1991. **TI** Should the Holding Period Matter for the Intertemporal Consumption-Based CAPM? **AA** University of Pennsylvania. **SR** National Bureau of Economic Research Working Paper: 3583; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 31. **PR** \$2.00. **JE** G12, G14. **KW** Asset Pricing. Asset Markets. Consumption.

AB Empirical studies of the restrictions implied by the intertemporal capital asset pricing model across different asset markets have found conflicting evidence. In general, restrictions from this model have been rejected over short holding periods, but not over longer holding periods such as a quarter. This paper asks whether an auxiliary assumption implicit in these tests could be responsible for the observed pattern of rejections. The auxiliary assumption requires that covariances of returns with consumption move in constant proportion over time. The paper first describes how this condition may break down within the context of a general equilibrium pricing relationship. Then, the condition is tested empirically using data on foreign exchange, bonds, and equity returns. Interestingly, the pattern of consumption covariances in foreign exchange and bonds indeed match the pattern of rejection in the intertemporal asset pricing relationship.

TI Learning about Intervention Target Zones. **AU** Klein, Michael W.; Lewis, Karen K.

Lindbeck, Assar

PD 1990. **TI** Segmented Labor Markets and Unemployment. **AU** Lindbeck, Assar; Snower, Dennis J. **AA** Lindbeck: University of Stockholm. Snower: Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 29/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 34. **PR** no charge. **JE** J42, J64, J41. **KW** Unemployment. Segmented Labor Markets. Wages. Employment.

AB The paper suggests various alternatives to the Harris-Todaro theory in explaining unemployment in segmented labor markets. We focus on a labor market with a perfectly competitive secondary sector and an imperfectly competitive primary sector, the latter combining salient features of the efficiency wage, insider-outsider, and bargaining theories of employment and wage formation. Unemployment and labor market segmentation are explained with reference to heterogeneous preferences, productivities, and endowments among workers. The responsiveness of unemployment to external shocks is shown to depend crucially on whether they are endogenously generated through workers' employment histories.

PD 1990. **TI** "Inter-Industry Wage Structure and the Power of Incumbent Workers" and "Interactions between the Efficiency Wage and Insider-Outsider Theory." **AU** Lindbeck, Assar; Snower, Dennis J. **AA** Lindbeck: University of Stockholm. **SN** Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 22/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 24. **PR** no charge. **JE** J31, J41. **KW** Insider-Outsider Theory. Efficiency Wages. Wage Structure. Bargaining.

AB I. The paper explores the insider-outsider explanation of various stylized facts concerning inter-industry wage structure. We assume that wages are the outcome of a bargaining process whereby firms and their insiders share the economic rent from insider employment. In this context, we analyze why industries which pay comparatively high wages to workers in one particular occupation also tend to pay comparatively high wages to workers in other occupations, and similarly for workers of different age groups, durations of job tenure, and countries. II. The paper combines the efficiency wage and insider-outsider theories of wage formation and explores whether the different wage-setting motives identified by these theories reinforce or weaken one another.

Lipietz, Alain

PD 1990. **TI** Capital/Labor Relations: A Worldwide Perspective. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9016; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 47. **PR** 20 F. **JE** J53, O11, O57, M12. **KW** Economic Development. Labor Relations. Industrialization.

AB This paper shows that there is not a single way out of the crisis of "fordist-type" capital-labor relations. Two main directions are possible ("flexibility" and "negotiated involvement"). They are not completely mutually consistent, and they are not consistent with any given regional situation. The paper first studies the possibilities of these alternative solutions in the various OECD countries. Then it extends the analysis to Eastern Europe, China, India, and some newly industrializing countries. Then it analyzes the different causal forces which will influence the outcome in each territory, and the possibility of combining these solutions between territories. Social, ecological, and macroeconomic constraints are considered. Paper in French.

PD 1990. **TI** Inflation, North and South: Monetary Aspects. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9017; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 66. **PR** 25 F. **JE** O11, E62, H63, E31. **KW** Inflation. Brazil. Seigniorage. Public Debt.

AB Besides their inertial and conflictual aspects, inflationary processes have a monetary aspect which may be an active cause. After a survey of the findings of "regulation approach" in the study of the inflationary crisis of "fordist" models of development, a stylization of the Brazilian case is considered as a peculiar configuration of public/external debt financed by seigniorage. Then treasury bonds tend to work as "high money" yielding interest. This high money, used as reserve money, is automatically (revalued) by comparison to vernacular money at a rate parallel to nominal interest rates, thus adding an inertial component to the inflationary process. Moreover a new conflictual component is added by the pressure on real interest rates.

Lipsey, Robert E.

PD February 1991. **TI** Foreign Direct Investment in the U.S. and U.S. Trade. **AA** Queens College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3623; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 38. **PR** \$2.00. **JE** F23, F14. **KW** Multinational Firms. Exports. Imports. Trade Model.

AB Foreign-owned manufacturing firm's shares of U.S. trade grew from almost nothing in the 1960s to 7 or 8 per cent of trade in manufactured goods by the 1980s. It has changed little in the past decade, except for fluctuations related to changing U.S. exchange rates. Foreign-owned firms are less export-oriented than U.S. parent companies, overall and in the same industries, and more dependent on imports, relative to their sales. The foreign affiliates' comparative advantage relative to U.S. parent firms and U.S. firms in general is concentrated in chemicals and metals industries. Foreign-owned firms in machinery and transport equipment do relatively little exporting from the U.S. in comparison with U.S.-owned firms.

Lockwood, Ben

PD July 1990. **TI** Border Controls and Tax Competition in a Customs Union. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 20/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 32. **PR** no charge. **JE** F41, F15, E63. **KW** Customs Union. Border Controls. Terms of Trade.

AB This paper considers the implications of the abolition of border controls for the design of commodity taxes in a general equilibrium environment where the terms of trade adjust to ensure a trade balance. It is assumed that cross-border shopping by consumers is costless and governments choose taxes noncooperatively. It is shown that abolition introduces a negative spillover effect from taxes which tends to bias equilibrium taxes upwards, in contrast to the conventional wisdom that "tax competition" reduces taxes. This result holds both for inter- and intra-industry trade. It is also possible that abolition of controls can raise consumer welfare. The effect of abolition on the gains from cooperation between governments over tax policy is also considered: it is shown that while in the case with controls, these gains depend crucially on the existence of countries possessing "monopoly power" over the terms of trade, this is not the case without controls - there may be large gains to cooperation even when countries have only a negligible effect on the terms of trade.

PD July 1990. **TI** Wage Setting and the Tax System: Theory and Evidence for the U.K. **AU** Lockwood, Ben; Manning, Allen. **AA** Lockwood: Birkbeck College. Manning: London School of Economics. **SR** Birkbeck College Discussion Paper in Economics: 19/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 32. **PR** no charge. **JE** H24, I51, J22, J31. **KW** Wages. Income Distribution. Taxes. Labor Supply. Bargaining.

AB This paper analyzes the effects of a nonlinear tax system in a traditional model of wage bargaining. The main conclusions are that (i) an increase in the marginal tax rate, holding the average rate constant reduces the pre-tax wage rate, (ii) in the iso-elastic case, an increase in the average tax rate, holding the marginal rate constant increases the pre-tax wage by more than the tax increase, and that (iii) a measure of the

progressivity of the tax system is a sufficient measure of the effect of the tax system on wage pressure. These results are related to the existing literature on tax incidence in product markets under imperfect competition. Some empirical evidence is presented to support these propositions. We also discuss the predictions of this model regarding the effect of recent changes to the tax system on the distribution of earnings. These predictions differ from those of the traditional labor supply model.

PD August 1990. **TI** The Folk Theorem in Stochastic Games with and without Discounting. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 18/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 42. **PR** no charge. **JE** C71, C73. **KW** Stochastic Game. Folk Theorem. Cooperative Games.

AB This paper characterizes the equilibrium payoffs with little or no discounting in a class of stochastic games known as scrambling games. These are games where, no matter what strategies chosen by the players, the resulting transition matrices have the property that given any pair of initial states, there is always some positive probability of moving to a common third state. We show that (i) the set of individually rational average payoffs has a very simple structure; (ii) this set coincides with the set of perfect equilibrium payoff vectors in the game with no discounting; (iii) the set of perfect equilibrium payoff vectors is continuous (i.e. both upper- and lower hemi-continuous) in the discount factor when the latter is equal to unity. The last two results generalize the results of Aumann-Shapley counterexamples to show that in the absence of the scrambling condition, each of the results may fail.

PD March 1991. **TI** Insider Power, Employment Dynamics and Multiple Inflation Equilibria. **AU** Lockwood, Ben; Philippopoulos, Apostolis. **AA** Lockwood: Birkbeck College. Philippopoulos: University of Essex. **SR** Birkbeck College Discussion Paper in Economics: 2/91; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 20. **PR** no charge. **JE** E31, E24, E13. **KW** Inflation. Dynamic Games. Unemployment.

AB This paper formally incorporates insider dynamics into the Barro-Gordon theory of inflation. We analyze both discretionary and reputational equilibria. Unlike in the static Barro-Gordon case, and even though the model is linear-quadratic, there can be two discretionary equilibria so that the same unemployment may correspond to either low or high inflation. However, both equilibrium inflation rates (measured per unit of the gap between the insiders' and government's employment targets) are higher than the corresponding rate in the static case. The low inflation equilibrium has intuitive comparative statics properties, in that inflation is increasing in insider power and the discount factor, but the high inflation equilibrium behaves in the opposite way. The model exhibits certainty equivalence in the sense that the equilibrium inflation rate per unit employment gap is unaffected by the introduction of stochastic shocks. In the reputational equilibrium, we show that when insider power or the discount factor is low, it may be possible to achieve a lower inflation than in the static case.

Londregan, John

TI A Model of the Political Economy of the United States. **AU** Alesina, Alberto; Londregan, John; Rosenthal, Howard.

Lovell, C. A. Knox

PD February 1990. **TI** A DEA Approach to the Problem of New and Disappearing Commodities in the Construction of Price Indices. **AU** Lovell, C. A. Knox; Zieschang, Kimberly D. **AA** Lovell: University of Adelaide and University of North Carolina. Zieschang: Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 202; Bureau of Labor Statistics, 441 "G" Street N.W., Room 2126, Washington, D.C. 20212. **PG** 19. **PR** no charge. **JE** C81, C82, E31, C43. **KW** Prices. Price Index. Commodities.

AB Important and frequently encountered problems in the production of price indexes are the appearance of new commodities that were unavailable when the item pricing sample was first designed, or the disappearance of commodities originally selected for inclusion in the index. There are several traditional methods for "splicing" old commodities out and/or new commodities in, and all hinge on some assumption about the comparability of the new or disappearing items with items continuously available for pricing throughout the period within which price comparisons are to be made. Hicks (1940) and Fisher and Shell (1972) have provided the currently accepted theoretical approach to dealing with the problem for price indexes. However, it has provided little guidance to index number practitioners, who are faced with attempting to estimate the unknown reservation prices. The purpose of this paper is to examine a programming approach to estimating reservation prices (or at least bounds on them).

TI The CET-CES-Generalized Leontief Variable Profit Function: An Application to Indian Agriculture. **AU** Behrman, Jere R.; Lovell, C. A. Knox; Pollack, Robert A.; Sickles, Robin C.

Lovrics, Laszlo

TI Missing Observations and Panel Data: A Monte-Carlo Analysis. **AU** Matyas, Laszlo; Lovrics, Laszlo.

Lyons, Richard K.

TI Sourcing Externalities. **AU** Bartelsman, Eric J.; Caballero, Ricardo J.; Lyons, Richard K.

Ma, Ching-to Albert

PD December 1990. **TI** A Signaling Theory of Unemployment. **AU** Ma, Ching-to Albert; Weiss, Andrew. **AA** Boston University. **SR** National Bureau of Economic Research Working Paper: 3565; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$2.00. **JE** J64, J63. **KW** Unemployment. Signaling.

AB This paper presents a signaling explanation for unemployment. The basic idea is that employment at an unskilled job may be regarded as a bad signal. Therefore, good workers who are more likely to qualify for employment at a skilled job in the future are better off being unemployed than accepting an unskilled job. We present conditions under which all equilibria satisfying the Cho-Kreps intuitive criterion involve unemployment. However, there always exist budget balancing wage subsidies and taxes that eliminate unemployment. Also, for any unemployment equilibrium, either there always exists a set of Pareto improving wage taxes and subsidies, or we give conditions under which there exists a set of Pareto improving wage taxes and subsidies.

Ma, Y.

TI The Measurement of Policy Effects in a Non-Causal Model: An Application to Economic Policy in the U.K., 1974-79. **AU** Artis, M. J.; Bladen-Hovell, R.; Ma, Y.

MacLeod, W. Bentley

PD October 1990. **TI** Wage Premiums and Profit Maximization in Efficiency Wage Models. **AU** MacLeod, W. Bentley; Malcomson, James M. **AA** MacLeod: Universite de Montreal. Malcomson: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9013; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 35. **PR** no charge. **JE** J41. **KW** Efficiency Wages. Wages. Shirking. Employment.

AB The conventional assumption that in equilibrium the short side of the market receives all the gains from trade is inappropriate for efficiency wage models of the shirking type. Many equilibria exist, some with efficiency wage outcomes, others without. If markets are sufficiently well informed about past employment history, the gains from trade can be redistributed without adverse consequences for employment. But in anonymous markets, employment is highest in those equilibria in which agents on the long side receive the gains from trade. This result provides a stronger rationale for efficiency wages than do exogenous limits on bonding.

PD April 1991. **TI** Investments, Hold Up, and the Form of Market Contracts. **AU** MacLeod, W. Bentley; Malcomson, James M. **AA** MacLeod: Universite de Montreal. Malcomson: University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9104; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 46. **PR** no charge. **JE** L15. **KW** Contracts. Prices. Transaction Costs.

AB This paper argues that many actual contracts have characteristics of incomplete contracts designed to induce efficient investment. When there are exogenous switching costs, contracts with a fixed price but no specified breach payments are efficient, generate some nominal rigidity in prices, are renegotiated every so often by what may be small amounts and, when inflation is positive, generate asymmetric responses to upwards and downwards shocks, all of which are consistent with much of the evidence on prices and wages. This provides a microtheoretic basis for staggered contract models and the apparent slow adjustment of wages to shocks. When both parties make specific investments, efficiency requires that the contract price is conditioned on sufficient external variables never to be renegotiated which corresponds to Joskow's evidence that long-term coal contracts have detailed escalator clauses and are rarely renegotiated. A third case, with investment by one party only may explain why firms sometimes pay for specific investments that appear to directly benefit their employees.

MaCurdy, Thomas E.

TI Nursing Home Discharges and Exhaustion of Medicare Benefits. **AU** Garber, Alan M.; MaCurdy, Thomas E.

Magnanti, Thomas L.

TI Capacitated Trees, Capacitated Routing, and Associated Polyhedra. **AU** Araque, G. Jesus Rafael; Hall, Leslie A.;

Magnanti, Thomas L.

Mairesse, Jacques

PD March 1991. **TI** R&D and Productivity: A Survey of Econometric Studies at the Firm Level. **AU** Mairesse, Jacques; Sassenou, Mohamed. **AA** Mairesse: Institut National de la Statistique, France and National Bureau of Economic Research. Sassenou: Caisse des Depots et Consignations II, France. **SR** National Bureau of Economic Research Working Paper: 3666; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** O32, O47. **KW** R&D. Productivity.

AB This paper surveys econometric studies investigating the relationship between R&D and productivity at the firm level and assesses the results obtained so far and some of the problems encountered. The findings reviewed fall naturally into three major categories: based on the cross-sectional or time series dimensions of the data and specified in terms of the elasticity of R&D or the rate of return to R&D. In view of the problems involved in modeling the effects of R&D on productivity and in measuring the appropriate variables, it is an agreeable surprise that most studies have managed to produce statistically significant and frequently plausible estimates. However, many of the current studies are not fully comparable and their results still leave much to be desired. The task of achieving progress is an arduous one.

TI Dispersion and Heterogeneity of Firm Performances in Nine French Service Industries, 1984-1987. **AU** Kremp, Elizabeth; Mairesse, Jacques.

Malcomson, James M.

TI Wage Premiums and Profit Maximization in Efficiency Wage Models. **AU** MacLeod, W. Bentley; Malcomson, James M.

TI Investments, Hold Up, and the Form of Market Contracts. **AU** MacLeod, W. Bentley; Malcomson, James M.

Mammen E.

TI Bootstrap Methods in Nonparametric Regression. **AU** Hardle, Wolfgang K.; Mammen E.

Mammen, E.

TI Comparing Nonparametric versus Parametric Regression Fits. **AU** Hardle, Wolfgang K.; Mammen, E.

Manning, Allen

TI Wage Setting and the Tax System: Theory and Evidence for the U.K. **AU** Lockwood, Ben; Manning, Allen.

PD February 1991. **TI** Authority in Employment Contracts: A Bilateral Bargaining Model. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 21; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 27. **PR** no charge. **JE** J41, J23. **KW** Employment. Wages. Contracts.

AB This paper takes a model of the employment contract which is incomplete in the sense that the required effort level is not exactly specified when employment is agreed and in which each worker negotiates their own contract with their employer.

Given the incompleteness of the employment contract, residual rights of control over labor need to be specified. This paper analyzes the allocation of these residual rights of control. It is argued that the equilibrium employment contracts will tend to give the employer residual rights of control over labor, if workers are potential substitutes and give workers residual rights of control if workers are complements. However, it may not be the case that the equilibrium contracts maximize the available social surplus; in this case there is an argument for government intervention to regulate the form of employment contracts.

PD March 1991. **TI** The Effects of Density on Wages and Employment: A Dynamic Monopoly Union Model. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 20; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 39. **PR** no charge. **JE** J52, J51, J41. **KW** Unions. Wages. Employment.

AB This paper looks at wage and employment determination in a dynamic model where some workers, e.g. non-union members, continue to work in the event of a dispute. It shows that both wages and employment may be a non-monotonic function of union density. It can also explain the situations in which unions are sustainable in the long-run. The model is applied to the analysis of the closed shop and some aspects of recent British trade union legislation.

PD March 1991. **TI** Pre-Strike Ballots and Wage-Employment Bargaining. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 19; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 29. **PR** no charge. **JE** J52, J51, J65, J31. **KW** Unions. Strikes. Wages. Employment.

AB This paper attempts to construct a model of the economic effects of the introduction of pre-strike ballots in Britain in the Employment Act (1984). It argues that strike ballots tend to reduce union influence over issues which affect different workers in different ways (like plant closures) and will do little to alter union influence over issues which affect workers similarly (like wages). The effect is that compulsory ballots may reduce employment and do little to reduce wages. The robustness of this result is explored in a number of models. An alternative legal framework is also suggested.

Marchand, Maurice

TI The Use of Public Expenditures for Distributive Purposes. **AU** Boadway, Robin; Marchand, Maurice.

TI Pay-As-You-Go Social Security in a Changing Environment. **AU** Boadway, Robin; Marchand, Maurice; Pestieau, Pierre.

PD October 1990. **TI** Optimal Intergenerational Transfers in a Growth Model with Fertility and Productivity Changes. **AU** Marchand, Maurice; Michel, Philippe; Pestieau, Pierre. **AA** Marchand: Universite Catholique de Louvain. Michel: Universite Paris I and Universite Catholique de Louvain. Pestieau: Universite de Liege and Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9059; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve,

BELGIUM. **PG** 16. **PR** not available. **JE** E13. **KW** Overlapping Generations Model. Productivity. Fertility. Social Security.

AB This paper extends Diamond's overlapping generations model to an economy with changing productivity and fertility. It analyzes to what extent in such a setting the market and the optimal solutions diverge. It then shows that a flexible pay-as-you-go social security scheme can make the market solution dynamically efficient.

Markusen, James R.

TI Accounting for Growth with New Inputs. **AU** Feenstra, Robert C.; Markusen, James R.

PD April 1991. **TI** Environmental Policy when Market Structure and Plant Locations are Endogenous. **AU** Markusen, James R.; Morey, Edward R.; Olewiler, Nancy. **AA** Markusen and Morey: University of Colorado. Olewiler: Simon Fraser University. **SR** National Bureau of Economic Research Working Paper: 3671; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$2.00. **JE** D62, D61, R13, Q28. **KW** Environment. Pollution. Welfare Analysis. Regional Analysis.

AB A two-region, two-firm model is developed in which firms choose the number and the regional locations of their plants. Both firms pollute and, in this context, market structure is endogenous to environmental policy. There are increasing returns at the plant level, imperfect competition between the two markets. These features imply that at critical levels of environmental policy variables, small policy changes cause large discrete jumps in a region's pollution and welfare as a firm closes or opens a plant, or shifts production for the foreign region from/to the home-region plant to/from a foreign branch plant. The implications for optimal environmental policy differ significantly from those suggested by traditional Pigouvian marginal analysis.

TI Trade Liberalization in a Multinational-Dominated Industry: A Theoretical and Applied General-Equilibrium Analysis. **AU** Hunter, Linda; Markusen, James R.; Rutherford, Thomas F.

Marshall, David

TI The Permanent Income Hypothesis Revisited. **AU** Christiano, Lawrence J.; Eichenbaum, Martin; Marshall, David.

Martin, Carmela

PD April 1991. **TI** Spain's Industrial Exports to the EEC: A Panel Data Approach. **AU** Martin, Carmela; Moreno, Lourdes. **AA** Fundacion Empresa Publica, Madrid. **SR** Centre for Economic Policy Research Discussion Paper: 521; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 25. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F14, O52. **KW** Spain. Exports. European Community. Trade Models.

AB This paper investigates the determinants of trends in Spain's industrial exports to other Community countries by using a sectoral panel data approach. Apart from overcoming the bias likely to arise from aggregate trade equations, this procedure is useful in detecting the existence of individual (sectoral) effects which, according to new "industrial

organization" trade models, seem to be crucial in explaining industrial trade patterns. Our results show that both cost and price elasticities of export demand differ widely among sectors. Additionally, they support the hypothesis about the significant influence of advertising expenditure and, to a lesser extent, technological effort on Spain's industrial export performance.

Martin, Chris

TI External Constraints on European Unemployment. **AU** Alogoskoufis, George S.; Martin, Chris.

TI Pricing and Product Market Structure in Open Economies. **AU** Alogoskoufis, George S.; Martin, Chris; Pittis, Nikitas.

TI Pricing and Product Market Structures in Open Economies: An Empirical Test. **AU** Alogoskoufis, George S.; Martin, Chris; Pittis, Nikitas.

Mastroiannis, Tasos

TI Testing Purchasing Power Parity for Cointegration. **AU** Pippenger, John; Mastroiannis, Tasos.

Mathieson, Donald J.

TI Is the EMS the Perfect Fix? An Empirical Exploration of Exchange Rate Target Zones. **AU** Flood, Robert P.; Rose, Andrew K.; Mathieson, Donald J.

TI An Empirical Exploration of Exchange Rate Target-Zones. **AU** Flood, Robert P.; Rose, Andrew K.; Mathieson, Donald J.

Matsuyama, Kiminori

PD January 1991. **TI** Agricultural Productivity, Comparative Advantage and Economic Growth. **AA** Northwestern University. **SR** National Bureau of Economic Research Working Paper: 3606; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$2.00. **JE** O13, O47. **KW** Economic Development. Agriculture. Economic Growth. **AB** The role of agricultural productivity in economic development is addressed in a two-sector model of endogenous growth in which a) preferences are non-homothetic and the income elasticity of demand for the agricultural good is less than unitary, and b) the engine of growth is learning-by-doing in the manufacturing sector. For the closed economy case, the model predicts a positive link between agricultural productivity and economic growth and thus provides a formalization of the conventional wisdom, which asserts that agricultural revolution is a precondition for industrial revolution. For the open economy case, however, the model predicts a negative link; that is, an economy with a relatively unproductive agricultural sector experiences faster and accelerating growth.

Matyas, Laszlo

PD February 1991. **TI** Missing Observations and Panel Data: A Monte-Carlo Analysis. **AU** Matyas, Laszlo; Lovrics, Laszlo. **AA** Matyas: Monash University. Lovrics: Budapest University. **SR** Monash Department of Econometrics Working Paper: 2/91; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 13. **PR** no charge. **JE** C23, C15, C51. **KW** Panel Data. Error Components Model. Missing Observations. Monte Carlo Experiment. Risk Function.

AB By means of Monte-Carlo experiments the loss of efficiency of the main error components' models estimators is analyzed if from a panel data base those individuals are dropped for which the observations are not complete. An empirical risk function has been estimated. This can help to measure the risk of the use of complete sub-panels instead of the original but incomplete ones.

Mayer, Wolfgang

PD March 1990. **TI** Voter Preferences for Trade Policy Instruments. **AU** Mayer, Wolfgang; Riezman, Raymond G. **AA** Mayer: University of Cincinnati. Riezman: California Institute of Technology and University of Iowa. **SR** Caltech Social Science Working Paper: 722; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 24. **PR** no charge. **JE** F13, D71, D72. **KW** Trade Policy. Tariffs. Commercial Policy. Subsidies.

AB We analyze voter preferences for tariffs and production subsidies. The distribution of tax revenues argument shows that voters with high direct tax burdens prefer tariffs to subsidies. The uncertainty argument demonstrates that if actual tariff and subsidy rates are chosen from the set of individually optimal rates then the range of tariff rates is smaller than the range of subsidy rates. Thus, tariffs might be preferred even though they are less efficient. Finally, the large country argument shows that if a country is large then voters whose income shares decline with more protection prefer tariffs to subsidies.

McAfee, R. Preston

PD March 1990. **TI** Organizational Diseconomies of Scale. **AU** McAfee, R. Preston; McMillan, John. **AA** McAfee: California Institute of Technology and University of Western Ontario. McMillan: University of California, San Diego. **SR** Caltech Social Science Working Paper: 728; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 18. **PR** no charge. **JE** L22, L21, D82. **KW** Hierarchies. Mechanism Design. Principal-Agent Model. Firm Size. Industrial Organization.

AB This paper models strategic behavior within firms. The principal (e.g., the firm's owner) is handicapped by not knowing as much about the firm's capabilities as the agent(s) (e.g., the manager). The agent can extract some rents from his private information. The principal can retrieve some of these rents at the expense of introducing a distortion, paying the agent less than the full value of his marginal product. As a result the firm operates inefficiently. The degree of this inefficiency varies with demand elasticity and with the length of the firm's managerial hierarchy. The costs of operating the hierarchy create a limit to the size of the firm.

PD April 1990. **TI** A Stone-Weierstrass Theorem without Closure under Suprema. **AU** McAfee, R. Preston; Reny, Philip J. **AA** McAfee: California Institute of Technology and University of Western Ontario. Reny: University of Western Ontario. **SR** Caltech Social Science Working Paper: 727; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 9. **PR** no charge. **JE** C61, C62. **KW** Revelation Principle. Incentive Compatibility. Separation Theorem.

AB For a compact metric space X , consider a linear subspace A of $C(X)$ containing the constant functions. One version of the Stone-Weierstrass theorem states that, if A separates points,

then the closure of A under both minima and maxima is dense in $C(X)$. Similarly, by the Hahn-Banach theorem, if A separates probability measures, A is dense in $C(X)$. We show that if A separates points from probability measures, then the closure of A under minima is dense in $C(X)$. This theorem has applications in economic theory.

PD May 1990. **TI** A Dominant Strategy Double Auction. **AA** California Institute of Technology and University of Western Ontario. **SR** Caltech Social Science Working Paper: 734; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 15. **PR** no charge. **JE** D44, C78, D80. **KW** Dominant Strategy. Auctions.

AB A double auction mechanism that provides dominant strategies for both buyers and sellers is analyzed. This mechanism satisfies the $1/n$ convergence to efficiency of the buyer's bid double auction. In addition, the mechanism always produces full information first best prices; the inefficiency arises because the least valuable profitable trade may be prohibited by the mechanism. The mechanism has an oral implementation utilizing bid and asked prices.

PD May 1990. **TI** Bidding Rings. **AU** McAfee, R. Preston; McMillan, John. **AA** McAfee: University of Western Ontario. McMillan: University of California, San Diego. **SR** Caltech Social Science Working Paper: 726; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 18. **PR** no charge. **JE** D43, D44. **KW** Collusion. Auctions. Cartel. Oligopoly.

AB We characterize coordinated bidding strategies in two cases; a weak cartel, in which the bidders cannot make side-payments; and a strong cartel, in which the cartel members can exclude new entrants and can make transfer payments. The weak cartel can do no better than have its members submit identical bids. The strong cartel in effect re-auctions the good among the cartel members.

McAleer, Michael

TI Some Power Comparisons of Joint and Paired Tests for Non-Nested Models under Local Hypotheses. **AU** Dastoor, Naorayex K.; McAleer, Michael.

PD July 1988. **TI** A Sequential Testing Procedure for Outliers and Structural Change. **AU** McAleer, Michael; Tse, Y. K. **AA** McAleer: Australian National University. Tse: National University of Singapore. **SR** Australian National University Working Paper in Economics and Econometrics: 167; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 16. **PR** no charge. **JE** C52, C51. **KW** Independent Tests. Outliers. Structural Change.

AB In this paper a test for outliers based on externally studentized residuals is shown to be related to a test for predictive failure. The relationships between a test for outliers, a test for a correlated mean shift and a test for an intercept shift are developed. A sequential testing procedure for outliers and structural change is shown to be independent, so that the overall size of the joint test can be determined exactly. It is established that a joint test for outliers and constancy of variance cannot be performed.

TI A Simple Method for Testing a General Parametric Model against a Non-Nested Alternative. **AU** Horowitz, Joel

L.; McAleer, Michael.

TI Discrimination between Nested Two-and-Three-Parameter Distributions: An Application to Models of Air Pollution. **AU** Bai, Jun; Jakeman, Anthony J.; McAleer, Michael.

TI On Efficient Estimation and Correct Inference in Models with Generated Regressors: A General Approach. **AU** McKenzie, C. R.; McAleer, Michael.

TI Alternative Procedures for Converting Qualitative Response Data to Quantitative Expectations: An Application to Australian Manufacturing. **AU** Smith, Jeremy; McAleer, Michael.

McClelland, Robert

PD June 1990. **TI** The Effects of Government Transfer Payments on Charitable Contributions. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 207; Bureau of Labor Statistics, 441 "G" Street N.W. Room 2126, Washington, D.C. 20212. **PG** 30. **PR** no charge. **JE** H41, H23, H50. **KW** Public Goods. Consumer Expenditure Survey. Charity. Taxes. Transfer Programs.

AB This paper examines the government crowding out of the private provision of public goods, offering an estimation of the effects of changes in government wealth transfers upon private contributions. In distinction to previous works these effects are estimated in a general equilibrium framework in which the income effect of government provision is estimated separately from the income effect of increased taxation, allowing comparisons with theoretic work and a measure of the range of crowding out across different income groups. Using a Tobit analysis on the 1984 Consumer Expenditure Survey, this range is shown to be sufficiently small to allow governments freedom in distributing lump sum tax increases without substantially affecting the aggregate level of provision, although there is great variation in crowding out across different transfer programs.

McCulloch, Rachel

PD April 1991. **TI** Investment Policies in the GATT. **AA** Brandeis University. **SR** National Bureau of Economic Research Working Paper: 3672; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** F13, F14, F23, F21. **KW** Tariffs. Trade Policy. Trade Negotiations. Multinational Firms.

AB Host country policies toward inward direct investment can have predictable effects on trade flows. "Trade related investment measures" (TRIMs) such as local-content requirements and minimum-export requirements have recently come under official scrutiny in the General Agreement on Tariffs and Trade. This paper examines the economic and political context of the Uruguay Round negotiations on TRIMs. In the negotiations, investment measures have been treated as a particular instance of a broader problem: the proliferation of nontariff trade distortions. As with other trade distortions, the negotiating strategy has been to identify specific policies to be proscribed or limited. However, this approach ignores the typical interactions between multinational firms and host governments.

McDermed, Ann A.

TI Pensions, Bonding, and Lifetime Jobs. **AU** Allen,

Steven G.; Clark, Robert L.; McDermed, Ann A.

McKenzie, C. R.

PD October 1990. **TI** On Efficient Estimation and Correct Inference in Models with Generated Regressors: A General Approach. **AU** McKenzie, C. R.; McAleer, Michael. **AA** McKenzie: Osaka University. McAleer: Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 211; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 34. **PR** no charge. **JE** C13, C22, C51, C52. **KW** Unobservable Variables. Misspecifications Missing Observations. Co-Integration. Expectations. Linear Model. Estimation.

AB Two approaches have been developed for deriving the properties of efficiency and consistency of standard errors of two step estimators of linear models containing current or lagged unobserved expectations on a single variable. One method is based on the derivatives of the likelihood function and information matrix, while the other uses the true covariance matrix of the disturbance vector when unknown parameters or variables are replaced by estimates. In this paper, the second approach is extended to cases where the structural equation is nonlinear, the model contains expectations on more than one variable or expectations on future variables, and different time periods are used for estimating the expectations and structural equations. The properties of the Cochrane-Orcutt procedure, Heckman's two step estimator for models with sample selection and a recently developed estimator for autoregressive moving average models can be easily derived using the results of the paper. Methods for improving the efficiency of two step estimators are outlined.

McMillan, John

TI Organizational Diseconomies of Scale. **AU** McAfee, R. Preston; McMillan, John.

TI Bidding Rings. **AU** McAfee, R. Preston; McMillan, John.

Meghir, Costas

TI Dynamic Investment Models and the Firm's Financial Policy. **AU** Bond, Stephen; Meghir, Costas.

Melick, William R.

PD September 1990. **TI** Estimating Pass-Through: Structure and Stability. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 387; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 37. **PR** no charge. **JE** F31, F32. **KW** Pass-Through. Imports. Exchange Rate. Devaluation.

AB This paper estimates the pass-through relationship between exchange rates and import prices for the United States using recursive techniques across a variety of specifications to examine structural and coefficient stability in a systematic fashion. Results of estimations: 1) indicate that pass-through at the macroeconomic level is a complicated amalgamation of disparate industrial structures that involves more than one long-run equilibrium relationship between the variables of interest, and 2) call into question the prevailing wisdom that

foreign firms changed their pricing behavior in light of the large appreciation in the exchange value of the dollar in the early 1980s.

Melitz, Jacques

PD January 1991. **TI** Monetary Policy in France. **AA** INSEE, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 509; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 36. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** E52, O52. **KW** Monetary Policy. France.

AB The discussion of monetary policy in France, which is intended for a chapter in a general handbook on monetary policy that will cover a number of other countries as well, begins with the early postwar period and carries the story up to the present. A separate section analyzes the new framework for monetary policy that was brought into place with the wave of reforms starting in 1984.

PD February 1991. **TI** German Reunification and Exchange Rate Policy in the EMS. **AA** INSEE, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 520; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 14. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, F33, F36. **KW** Exchange Rate. Germany. European Monetary System.

AB This stresses that the impact of German reunification on the DM is affected by current plans to move toward monetary union in the European Community. The fundamental value of the DM is different depending upon whether Germany will be part of a larger monetary union in the year 2000, or whether instead the EMS will have survived without major realignments or else with them. As a result, the impact of decisions by the other members to follow the DM during the process of German reunification will depend partly on market interpretations of the persistence of similar decisions in the future. The same policy actions by the others will have different effects depending upon the future outlook of the EMS.

Mester, Loretta J.

PD January 1991. **TI** Expense Preference and the Fed Revisited. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 91-6; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 37. **PR** no charge except overseas airmail, \$2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** E58. **KW** Federal Reserve. Central Bank.

AB This paper investigates the existence of expense-preference behavior toward labor in the Federal Reserve System over the period 1954-89. The empirical evidence presented by Boyes, Mounts, and Sowell (1988) suggested that the Fed did indulge in expense preference. However, the restrictiveness of the tests employed cast doubt on the results. In particular, the assumption of a Cobb-Douglas production structure for the Fed appears to be invalid. In addition, specification error and simultaneity bias may have affected their results. This paper shows that the data reject the joint hypothesis that the Fed uses a Cobb-Douglas production structure and indulges in expense preference toward labor. Further analysis using the test developed in Mester (1989),

which permits a less restrictive production technology, shows that the Fed did not indulge in expense-preference behavior over the sample period.

Metcalf, D.

TI A Century of U.K. Strike Activity: An Alternative Perspective. **AU** Milner, S.; Metcalf, D.

Miaouli, Natasha

PD November 1990. **TI** A Dynamic Monopoly Union Model with Insiders and Outsiders. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 30/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 21. **PR** no charge. **JE** J51, E24, J64, J41. **KW** Wage Bargaining. Employment. Insider-Outsider Theory. Unions. Monopoly. Unemployment.

AB It is known that the trade union literature enriched by the insiders-outsiders theory can account for the interpretation of the European unemployment persistence. This paper examines wage and employment determination in a monopoly union model with endogenous membership, and analyzes how trade union's objectives affect wage dynamics, employment persistence and saddle path stability.

Michel, Philippe

TI Which Rules Rather than Discretion: II - The Case of "Simple" Rules. **AU** Cohen, Daniel; Michel, Philippe.

PD June 1990. **TI** Criticism of the Social Time-Preference Hypothesis in Optimal Growth. **AA** University of Paris I and Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9039; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 12. **PR** not available. **JE** D63, D92, O41. **KW** Social Welfare Function. Golden Rule. Capital Stock. Growth Theory.

AB The aim of this paper is to reconsider the following question: which should be the weighting of future generations in the intertemporal social welfare function? I propose a simple answer: use as discount rate the marginal productivity of the Golden Rule capital stock which is identical to the growth rate of population. As a consequence, the intertemporal welfare objective should be the undiscounted sum of generational utilities, extending the Ramsey's original approach.

TI Economically Rational Expectations Equilibrium. **AU** Crettez, Bertrand; Michel, Philippe.

TI Optimal Intergenerational Transfers in a Growth Model with Fertility and Productivity Changes. **AU** Marchand, Maurice; Michel, Philippe; Pestieau, Pierre.

TI Credible Entry-Deterrence by Delegation. **AU** d'Aspremont, Claude; Michel, Philippe.

TI Which "Simple" Rules Rather than Discretion? **AU** Cohen, Daniel; Michel, Philippe.

TI Which Rules Rather than Discretion in a Democracy? An Axiomatic Approach. **AU** Cohen, Daniel; Michel, Philippe.

Miles, David K.

PD 1990. **TI** Profitability and Investment in British Manufacturing. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 5/90;

Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 27. **PR** no charge. **JE** L60, M21, L21. **KW** Profits. Manufacturing.

AB This paper assesses the profitability of manufacturing companies in the U.K. Profitability can only be assessed relative to some yardstick. Several different comparisons are useful. Profitability relative to the cost of capital (or cost of funds) is particularly relevant to the incentives to invest. Profitability in the manufacturing sector relative to profitability in other sectors of the domestic economy is an important indicator of future trends in the structure of the U.K. economy. Profitability in the U.K. relative to overseas competitors is important because it affects the ability of domestic firms to compete in international markets and to attract international funds.

PD January 1990. **TI** A Simple Explanation for Bias in the Foreign Exchange Market. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 1/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 17. **PR** no charge. **JE** F31, G15. **KW** Exchange Rate. Risk Premium. Forward Rate. Foreign Exchange.

AB There is now a substantial body of evidence that the forward rate is a biased predictor of the future exchange rate. This need not imply inefficiency in the market for foreign exchange since time varying risk premia can be invoked to explain the properties of the data. But theoretical and econometrically estimated models of risk premia do not seem to generate sufficiently variable premia to account for the bias. We argue that this is due to a failure to model exchange rate risk in a plausible way. A simple model is presented which generates highly volatile risk premia whose time series properties can account for bias in exchange rate data.

TI Monitoring Bank Risk - A Market Based Approach. **AU** Hall, Stephen; Miles, David K.

PD May 1990. **TI** What is Different about Financial Firms? **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 4/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 16. **PR** no charge. **JE** G14, G12, G21. **KW** Financial Sector. Financial Markets. Government Policy. Banks. Regulation.

AB Financial intermediaries in the U.K. are subject to forms of regulation which are specific to the financial sector. Most of the arguments used to justify such regulations rest on the premise that there are information problems - in particular information asymmetries - in financial markets which are different in degree, and perhaps in kind, from other markets. This paper uses information on the effects upon the share prices of banks of share issue announcements to assess the scale of information asymmetries in the banking sector. Significant differences between banks and non-financial firms do seem to exist and the argument that this justifies a system of banking regulation is considered.

PD July 1990. **TI** Financial Liberalization, the Housing Market and the Current Account. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Financial Economics: FE 6/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 30. **PR** no charge. **JE** G21, R31, R21. **KW** Credit. Housing Market. Mortgages.

AB Recent liberalization in financial markets has removed

certain credit restrictions for the U.K. personal sector. This paper analyzes the transitional and long-run impact of the easing of credit restrictions in the market for housing finance and argues that these effects are large and will take decades to work through. Unlike other studies of the impact of changes in the housing market this paper analyzes the effects in the framework of a dynamic general equilibrium model of the economy which distinguishes transitional from long-run effects. Recent trends in the U.K. economy are interpreted in the light of the model and policy implications considered.

TI An Empirical Study of Recent Trends in World Bond Markets. **AU** Hall, Stephen; Miles, David K.

Miller, Richard D.

PD October 1990. **TI** Another Look at the Medically Uninsured using the 1987 Consumer Expenditure Survey. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 206; Bureau of Labor Statistics, 441 "G" Street N.W. Room 2126, Washington, D.C. 20212. **PG** 29. **PR** no charge. **JE** 111. **KW** Health Insurance. Medical Insurance. Health Care.

AB The medically indigent can be defined as those who are at risk of not being able to afford needed health care. The most frequently considered proxy for this is the lack of any public or private health insurance coverage. The purpose of this study was to use the Consumer Expenditure Survey to identify the medically indigent. A household, or consumer unit, was considered to have inadequate health insurance coverage if at least one member lacked such coverage. Because of the binary nature of my dependent variable, I assigned a nonlinear functional form to its conditional expectation function, specifically the cumulative distribution function of the logistic distribution.

Milner, S.

PD March 1991. **TI** A Century of U.K. Strike Activity: An Alternative Perspective. **AU** Milner, S.; Metcalf, D. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 22; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 25. **PR** no charge. **JE** J52, J51. **KW** Strikes, Unions.

AB New series of strike activity over the last century are presented. Most strikers are union members. Therefore time series running from 1893 to 1989 for strike frequency, workers involved and days lost have been calculated on a per union member basis as well as on the traditional per employee basis. New information on average strike duration is also shown. The primary aim is to present the data but some highlights of the series are also noted.

Mincer, Jacob

PD January 1991. **TI** Human Capital, Technology, and the Wage Structure: What do Time Series Show? **AA** Columbia University. **SR** National Bureau of Economic Research Working Paper: 3581; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** \$2.00. **JE** J31, J24, J41, O33, J11. **KW** Human Capital. Wage Differentials. Education. Labor Productivity. Experience.

AB The major purpose of this study was to detect effects of technologically based changes in demand for human capital on

the educational and experience wage structure in annual CPS data, 1963 to 1987. Major findings are: 1. Year-to-year educational wage differentials are quite closely tracked by relative supplies of young graduates, and by indexes of relative demand, such as research and development (R&D) employment. 2. The observed steepening of experience profiles of wages is explained, in part, by changes in relative demographic supplies (cohort effects), and in part by the growing profitability of human capital which extends to that acquired on the job.

Minford, Patrick

TI The European Monetary System: Achievements and Survival. **AU** Hallett, Andrew Hughes; Minford, Patrick; Rastogi, Anupam.

Mintz, Jack M.

PD December 1990. **TI** Strategic Use of Tax Rates and Credits in a Model of International Corporate Income Tax Competition. **AU** Mintz, Jack M.; Tulkens, Henry. **AA** Mintz; University of Toronto. Tulkens: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9073; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 37. **PR** not available. **JE** H25, F21, F11. **KW** Foreign Tax Credits. Taxes. Credit.

AB The role of foreign tax crediting is examined in a context of international fiscal competition. A taxonomy of foreign source income taxation systems is first presented, showing how crediting and other tax parameters induce source-based, residence-based and related systems. Next, multiple Nash equilibria are exhibited in terms of credit and other relevant tax rates, which are shown to be insensitive to variations in crediting. Both source-based and residence-based systems appear to be consistent with Nash equilibria, but only if appropriate exceptions are introduced.

TI Decomposing the Welfare Costs of Capital Tax Distortions: The Importance of Risk. **AU** Hamilton, Bob; Mintz, Jack M.; Whalley, John.

Miron, Jeffrey A.

PD April 1991. **TI** Alcohol Consumption during Prohibition. **AU** Miron, Jeffrey A.; Zwiebel, Jeffrey. **AA** Miron: Boston University. Zwiebel: Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 3675; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 13. **PR** \$2.00. **JE** N12, E21. **KW** Alcohol. Consumption.

AB We estimate the consumption of alcohol during Prohibition using mortality, mental health and crime statistics. We find that alcohol consumption fell sharply at the beginning of Prohibition, to approximately 30 percent of its pre-Prohibition level. During the next several years, however, alcohol consumption increased sharply, to about 60-70 percent of its pre-Prohibition level. The level of consumption was virtually the same immediately after Prohibition as during the latter part of Prohibition, although consumption increased to approximately its pre-Prohibition level during the subsequent decade.

Mishkin, Frederic S.

PD December 1990. **TI** Yield Curve. **AA** Princeton University. **SR** National Bureau of Economic Research Working Paper: 3550; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 9. **PR** \$2.00. **JE** E31, E43, D84. **KW** Interest Rates. Inflation. Expectations. Term Structure.

AB This paper provides a brief survey of the relationship between the yield curve and future changes in interest rates and inflation. The expectations hypothesis of the term structure indicates that when the yield curve is upward sloping, future short-term and long-term interest rates are expected to rise. Empirical evidence finds that as predicted by the expectations hypothesis, yield spreads are positively correlated with future changes in short-term interest rates, particularly at long horizons. However, yield spreads are negatively correlated with next period's change in long-term interest rates, the opposite prediction of the expectations hypothesis.

PD February 1991. **TI** Is the Fisher Effect for Real? A Reexamination of the Relationship between Inflation and Interest Rates. **AA** Princeton University. **SR** National Bureau of Economic Research Working Paper: 3632; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** \$2.00. **JE** E43, E31, E32. **KW** Fisher Effect. Interest Rates. Inflation.

AB The basic puzzle about the so-called Fisher effect, in which movements in short-term interest rates primarily reflect fluctuations in expected inflation, is why a strong Fisher effect occurs only for certain periods but not for others. This paper resolves this puzzle by reexamining the relationship between inflation and interest rates with modern time series techniques. Recognition that the level of inflation and interest rates may contain stochastic trends suggests that the apparent ability of short-term interest rates to forecast inflation in the postwar United States is spurious. Additional evidence does not support the presence of a short-run Fisher effect but does support the existence of a long-run Fisher effect in which inflation and interest rates trend together in the long-run when they exhibit trends.

Mittelstaedt, H. Fred

PD April 1991. **TI** The Impact of Liabilities for Retiree Health Benefits on Share Prices. **AU** Mittelstaedt, H. Fred; Warshawsky, Mark. **AA** Mittelstaedt: Arizona State University. Warshawsky: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 156; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 38. **PR** no charge. **JE** J14, I11, I18. **KW** Retirement. Health Benefits. Medical Care. Health Care.

AB This study examines the association between liabilities for retiree health benefits and share prices. Results suggest that market estimates of the liabilities are imprecise. To the extent that the imprecision is due to insufficient accounting disclosures significant price adjustments, upward and downward, may occur when information required by a new accounting standard is disclosed. Additionally, there is some evidence indicating that the market does not expect the health benefit obligation to be paid in full. This result is consistent with market expectations that the firms or the federal government will take actions to reduce future health benefit payouts.

Mizon, Grayham E.

PD June 1990. **TI** The Role of Measurement and Testing in Economics. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9009; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 29. **PR** no charge. **JE** C52. **KW** Model Specification. Model Evaluation. Economic Models.

AB The assessment, and demonstration, of the coherence of economic models with empirical observation, is essential in economic science, despite the inherent conceptual and practical difficulties. The evaluation of economic models by checking their congruence with a priori theory, sample information, the measurement system, and the information contained in rival models, is a demanding, though impressive, way to establish their credentials, provided this evaluation is done within a statistically well specified framework - the Haavelmo distribution. It is then possible for the complementary roles of economic theory and empirical evidence to be exploited in the development of models which have economically interpretable structure, and no evidence of statistical misspecification.

TI Empirical Analysis of Macroeconomic Time Series: VAR and Structural Models. **AU** Clements, Michael P.; Mizon, Grayham E.

TI Evaluating Dynamic Econometric Models by Encompassing the VAR. **AU** Hendry, David F.; Mizon, Grayham E.

PD December 1990. **TI** Modelling Relative Price Variability and Aggregate Inflation in the United Kingdom. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9101; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 24. **PR** no charge. **JE** E31, C51, C52. **KW** Inflation. Prices. VAR. Econometric Models. Model Specification.

AB The relationship between relative price variability and aggregate inflation in the U.K. is used to illustrate a number of issues in econometric modeling methodology. The rigorous evaluation of models, especially testing for congruence and encompassing, is emphasized. The valuable role of recursive estimation methods in assessing model adequacy is demonstrated. Attention is drawn to the potential limitations of single equation and univariate analysis of time series data, and a recently proposed modeling strategy for analyzing nonstationary variables with co-integrating relationships, based on sequential reductions of a congruent VAR, is applied to a small system involving inflation and relative price variability.

Mobley, Lee Rivers

TI Scale Economies for Hospitals: A Multivariate Survivor Analysis. **AU** Frech, H. E., III; Mobley, Lee Rivers.

Moffitt, Robert

PD February 1991. **TI** Incentive Effects of the U.S. Welfare System: A Review. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 91-7; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 95. **PR** no charge. **JE** I38, H53. **KW** Labor Supply. Welfare. Government Transfers. Food Stamps. Poverty. Medicaid. Government Spending.

AB In this review I survey the results of research to date on the effects of the welfare system on work incentives, welfare dependency, family structure, migration, and intergenerational transmission of dependency. The review will cover AFDC, Food Stamps, Medicaid, and public housing.

Mohtadi, Hamid

PD January 1991. **TI** Political Economy of Endogenous Growth. **AU** Mohtadi, Hamid; Roe, Terry. **AA** Mohtadi: University of Wisconsin, Milwaukee. Roe: University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 91-1; Department of Agriculture and Applied Economics, 232 Classroom Office Building, University of Minnesota, St. Paul, MN 55108. **PG** 30. **PR** free. **JE** O41, D72, H41. **KW** Political Economy. Endogenous Growth. Lobbying. Growth Model. Public Goods. **AB** By introducing public goods into a dynamic growth model, this paper explores the impact of lobbying for public goods on the long-run steady-state growth rate of the economy. Using a life time utility maximizing approach, a positive level of lobbying is found to be socially efficient despite lobbying costs. However, individuals exceed this level by ignoring the tax implication of their lobbying via increased public expenditures. The notion of socially beneficial ("externality seeking") lobbying departs from the literature on rent seeking lobbying which, with some exceptions, view lobbying as welfare worsening. An extension analyzes the impact of lobbying to reduce taxes that finance the provision of public goods and draws similar results.

Mongin, Philippe

PD December 1990. **TI** The Logic of Belief Change and Nonadditive Probability. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9075; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 26. **PR** not available. **JE** C11, C44. **KW** Bayesian Analysis. Decision Theory. **AB** This paper investigates axiomatic conditions on belief change in the single-agent case using the formalisms of propositional calculus and nonadditive probability. It essentially consists in further developing the dynamical theory which has been set forth by Gärdenfors, Alchourron and Makinson. Epistemic states are captured by means of deductively closed sets of sentences. Three operations of belief changes are axiomatized and justified in this framework: expansion, correction, revision. Then, two concepts of epistemic entrenchment relations are defined, one of which connects with correction, the other with revision. These binary relations on the set of sentences are intended to describe the agent's relative reluctance to move away from his initial epistemic state when he is faced with novel evidence. They are the qualitative counterpart of a priori probability in the Bayesian theory of belief change. The main purpose of the paper is to interpret the epistemic entrenchment relations in terms of nonadditive probabilities.

Moon, Choon-Geol

PD April 1991. **TI** The Effect of Rent Control on Housing Quality Change: A Longitudinal Analysis. **AU** Moon, Choon-Geol; Stotsky, Janet G. **AA** Rutgers University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 91-7; Working Papers, Department of Research, Federal

Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 38. **PR** no charge except overseas airmail, \$2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** R31. **KW** Rent Control. Housing. Hedonic Model. Housing Market. **AB** This paper examines the effect of rent control on the quality of rental housing in New York City. The most innovative aspect of the analysis allows rent control to have differential effects on housing that improves in quality and housing that deteriorates in quality. In the first part of the analysis, we estimate a hedonic price index to determine the amount by which rent is suppressed below market levels. In the second part of the analysis, we examine the determinants of quality change, linking these changes to the suppression of rent below market levels. We develop a first-order nonstationary heterogeneous Markov model that allows for true state dependence, observed heterogeneity, nonparametric unobserved heterogeneity, and mover-stayer heterogeneity. The coefficients derived from the hedonic estimation are consistent with our intuition. We find that relatively new units, in Manhattan, with more rooms, in larger structures, in better quality neighborhoods, and with good maintenance rent for more than those units without these characteristics.

Moreno, Lourdes

TI Spain's Industrial Exports to the EEC: A Panel Data Approach. **AU** Martin, Carmela; Moreno, Lourdes.

Morey, Edward R.

TI Environmental Policy when Market Structure and Plant Locations are Endogenous. **AU** Markusen, James R.; Morey, Edward R.; Olewiler, Nancy.

Morrison, Catherine J.

PD January 1991. **TI** Assessing the Productivity of Information Technology Equipment in U.S. Manufacturing Industries. **AU** Morrison, Catherine J.; Berndt, Ernst R. **AA** Morrison: Tufts University. Berndt: National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3582; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** \$2.00. **JE** L60, O33, L21, L52. **KW** Manufacturing. Technology. Information Services. **AB** In this paper we report results of an empirical assessment of the cost reducing impacts of recent dramatic increases in stocks of "high-tech" office and information technology equipment (O), using annual data from various two digit U.S. manufacturing industries over the 1952-1986 time period. While there are exceptions, on balance we find that in 1986, estimated marginal benefits of investments in this O equipment are less than marginal costs, implying over-investment in O capital in 1986.

Mouchart, Michel

TI Weak Conditional Independence and Relative Invariance in Bayesian Statistics. **AU** Florens, Jean-Pierre; Mouchart, Michel; Rolin, Jean-Marie.

Murphy, Kevin M.

PD February 1991. **TI** Quality and Trade. **AU** Murphy, Kevin M.; Shleifer, Andrei. **AA** Murphy: University of Chicago. Shleifer: Harvard University. **SR** National Bureau of Economic Research Working Paper: 3622; National Bureau

of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 20. PR \$2.00. JE F14, F11. KW Trade Model. Human Capital. Economic Development.

AB We present a model of trade in which similar countries trade more with each other than very different countries. The reason is that high human capital countries have a comparative advantage at producing high quality goods, but are also rich enough to want to consume high quality. As a result, countries choose trading partners at a similar level of development, who produce similar quality products. The model helps account for the observed trade patterns, and sheds light on international income comparisons. It also helps explain recent concerns of Eastern European countries that they have "nothing to sell" to the West.

Nadiri, M. Ishaq

TI Product Demand, Cost of Production, Spillovers, and the Social Rate of Return to R&D. AU Bernstein, Jeffrey I.; Nadiri, M. Ishaq.

TI Endogenous Capital Utilization and Productivity Measurement in Dynamic Factor Demand Models: Theory and an Application to the U.S. Electrical Machinery Industry. AU Prucha, Ingmar R.; Nadiri, M. Ishaq.

Neumark, David

TI Lump-Sums, Profit Sharing, and Labor Costs in the Union Sector. AU Bell, Linda A.; Neumark, David.

TI Omitted-Ability Bias and the Increase in the Return to Schooling. AU Blackburn, McKinley L.; Neumark, David.

Ng, Victor K.

TI Measuring and Testing the Impact of News on Volatility. AU Engle, Robert F.; Ng, Victor K.

TI Time-Varying Volatility and the Dynamic Behavior of the Term Structure. AU Engle, Robert F.; Ng, Victor K.

Nosal, Ed

PD January 1991. TI A Note on Labor Contracts with Private Information and Household Production. AU Nosal, Ed; Rogerson, Richard; Wright, Randall. AA Nosal: University of Waterloo. Rogerson: Stanford University. Wright: University of Pennsylvania and Federal Reserve Bank of Minneapolis. SR Federal Reserve Bank of Minneapolis Staff Report: 131; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. PG 11. PR no charge. JE D13, J41, D82, D11. KW Private Information. Underemployment. Household Production. Implicit Contracts.

AB A classic result in the theory of implicit contract models with asymmetric information is that "underemployment" results if and only if leisure is an inferior good. We introduce household production into the standard implicit contract model and show that we can have underemployment at the same time that leisure is a normal good.

Nussbaum, Michael

TI Bootstrap Confidence Bands. AU Hardle, Wolfgang K.; Nussbaum, Michael.

Obstfeld, Maurice

PD January 1991. TI Destabilizing Effects of Exchange-Rate Escape Clauses. AA University of California at Berkeley. SR National Bureau of Economic Research Working Paper: 3603; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 29. PR \$2.00. JE E42, F36, F33. KW Exchange Rate. Monetary System. Monetary Regimes. National Currency.

AB This paper studies the merits of policy rules with escape clauses, analyzing as an example fixed exchange rate systems that allow member countries the freedom to realign in periods of stress. Motivating this example is the debate within the European Monetary system over how quickly to move from the current regime of national currencies, linked by pegged but adjustable exchange rates, to a single European currency. The paper's main point is that while well-designed rules with escape clauses can raise society's welfare in principle, limited credibility makes it difficult for governments to implement such rules in practice.

PD March 1991. TI Dynamic Seigniorage Theory: An Exploration. AA University of California, Berkeley. SR Centre for Economic Policy Research Discussion Paper: 519; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 58. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE H63, E31, E52. KW Seigniorage. Monetary Policy. Inflation. Public Debt.

AB This paper develops a dynamic model of seigniorage in which economies' equilibrium paths reflect the ongoing strategic interaction between an optimizing government and a rational public. The model extends existing positive models of monetary policy and inflation by explicitly incorporating the intertemporal linkages among budget deficits, debt and inflation. A central finding is that the public's rational responses to government policies may well create incentives for the government to reduce inflation and the public debt over time. A sufficiently myopic government may, however, provoke a rising equilibrium path of inflation and public debt.

TI Exchange Rate Dynamics under Stochastic Regime Shifts: A Unified Approach. AU Froot, Kenneth A.; Obstfeld, Maurice.

PD March 1991. TI Destabilizing Effects of Exchange-Rate Escape Clauses. AA University of California, Berkeley. SR Centre for Economic Policy Research Discussion Paper: 518; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 29. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F31, E42, E52, F36, F33. KW Exchange Rate. Monetary Policy. Monetary Regimes. Currency. Monetary Union.

AB This paper studies the merits of policy rules with escape clauses, analyzing as an example fixed exchange rate systems that allow member countries the freedom to realign in periods of stress. Motivating this example is the debate within the European Monetary System over how quickly to move from the current regime of national currencies, linked by pegged but adjustable exchange rates, to a single European currency. The paper's main point is that while well-designed rules with escape clauses can raise society's welfare in principle, limited credibility makes it difficult for governments to implement such rules in practice.

Olewiler, Nancy

TI Environmental Policy when Market Structure and Plant Locations are Endogenous. **AU** Markusen, James R.; Morey, Edward R.; Olewiler, Nancy.

Orlean, Andre

TI The Transformations of Wage Systems, between Economic Theory and History: From Henry Ford to American Fordism. **AU** Boyer, Robert; Orlean, Andre.

Orsi, Renzo

TI Testing Exogeneity in Overidentified Models. **AU** Cappuccio, Nunzio; Orsi, Renzo.

Oswald, Andrew J.

TI Efficient and Inefficient Employment Outcomes: A Study Based on Canadian Contract Data. **AU** Christofides, Louis N.; Oswald, Andrew J.

Ouellette, P.

TI The Producer and the Real Balance Effect. **AU** Bronsard, Camille; Ouellette, P.; Salvas-Bronsard, L.

Ozler, Sule

TI Debt Concentration and Secondary Market Prices: A Theoretical and Empirical Analysis. **AU** Fernandez, Raquel; Ozler, Sule.

Palfrey, Thomas R.

PD April 1990. **TI** Testing Game-Theoretic Models of Free Riding: New Evidence on Probability Bias and Learning. **AU** Palfrey, Thomas R.; Rosenthal, Howard. **AA** Palfrey: California Institute of Technology. Rosenthal: Carnegie Mellon University and Massachusetts Institute of Technology. **SR** Caltech Social Science Working Paper: 730; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 42. **PR** no charge. **JE** H41, C92, D81, D83. **KW** Public Goods. Experiments. Game Theory. Bias.

AB This paper presents findings from a large number of laboratory experiments on voluntary public good provision where individuals in small groups had private information about their preferences and were given commonly known objective information about the distribution of preferences of the other individuals. The public good is binary and is provided if and only if the number of contributions exceeds a fixed and publicly known "provision point". We compare aggregate behavior in the experiments with the aggregate predictions of a risk neutral Bayesian equilibrium theory. We report three findings. First, the equilibrium predictions about aggregate behavior are very accurate. Second, to the extent that there are some variations from the game theoretic predictions, they are consistent with a simple model of probability bias: individuals underestimate the amount of free riding by others. Third, we find only weak evidence that individuals update these inaccurate beliefs about other subjects' inclinations to free ride.

Paloni, Alberto

PD August 1990. **TI** Models of External Balance Constraints on Domestic Policies: An Application to Argentina, Brazil and Mexico. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 21/90; Birkbeck

College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 44. **PR** no charge. **JE** O57, E64, F32, E13, E63. **KW** Macroeconomic Policy. Devaluation. Taxation. Competitiveness. Balance of Payments. Inflation. Indexation. Incomes Policy.

AB I examine the constraints that the need to achieve external balance imposes on domestic macroeconomic policies by estimating and testing two alternative macro models for the economies of Argentina, Brazil and Mexico. Besides giving a good account of economic fluctuations in the three countries, the estimates show that each economy is characterized by its own pattern of adjustment towards equilibrium. I discuss the implications of this finding for a number of important issues: the effect of an interruption in the flow of international funds, exchange rate and tax policy, inflation and stabilization. The effectiveness of traditional stabilization policies is strongly questioned.

Panagariya, Arvind

PD March 1991. **TI** Political-Economy Arguments for a Uniform Tariff. **AU** Panagariya, Arvind; Rodrik, Dani. **AA** Panagariya: World Bank and University of Maryland. Rodrik: Harvard University. **SR** National Bureau of Economic Research Working Paper: 3661; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** \$2.00. **JE** F13, D72. **KW** Tariffs. Protectionism. Lobbying.

AB Uniform tariffs have become increasingly popular in recent years, yet their economic rationale is not strong. We identify and evaluate three sets of reasons as to why governments may prefer tariff uniformity as a means of alleviating political motives for excessive protection. First, a free rider effect may be conducive to less lobbying under a uniform tariff regime than under a regime in which tariffs are allowed to differ. Second, an input-price effect may dampen the enthusiasm of final goods producers for import protection. Third, a precommitment effect may increase the cost to a future government of protecting favored sectors. None of these arguments provides an unambiguous, airtight case for tariff uniformity. The decision on uniformity has to be made on a case-by-case basis.

Parente, Stephen L.

PD February 1991. **TI** Technology Adoption and Growth. **AU** Parente, Stephen L.; Prescott, Edward C. **AA** Parente: U.S. Department of Justice. Prescott: Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 136; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 27. **PR** no charge. **JE** O41, O57, O31, O34. **KW** Technology Adoption. Technology. Growth Model. Taxation.

AB Technology change is modeled as the result of decisions of individuals and groups of individuals to adopt more advanced technologies. The structure is calibrated to the U.S. and postwar Japan growth experiences. Using this calibrated structure we explore how large the disparity in the effective tax rates on the returns to adopting technologies must be to account for the huge observed disparity in per capita income across countries. We find that this disparity is not implausibly large.

Pennacchi, George

TI Banks and Loan Sales: Marketing Non-Marketable

Assets. AU Gorton, Gary; Pennacchi, George.

Pepall, Lynne

TI Sequential Entry, Experience Goods and Brand Loyalty. AU Gabszewicz, Jean J.; Pepall, Lynne; Thisse, Jacques-Francois.

Persson, Torsten

PD January 1991. TI Is Inequality Harmful for Growth? Theory and Evidence. AU Persson, Torsten; Tabellini, Guido. AA Persson: Institute for International Economic Studies, Stockholm. Tabellini: University of California, Los Angeles. SR National Bureau of Economic Research Working Paper: 3599; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 37. PR \$2.00. JE O41, O15, O11. KW Economic Growth. Political Economy. Knowledge. Capital. Income Distribution.

AB Is inequality harmful for growth? We suggest that it is. To summarize our main argument: in a society where distributional conflict is more important, political decisions are more likely to produce economic policies that allow private individuals to appropriate less of the returns to growth promoting activities, such as accumulation of capital and productive knowledge. In the paper we first formulate a theoretical model that formally captures this idea. The model has a politico-economic equilibrium, which determines a sequence of growth rates depending on structural parameters, political institutions, and initial conditions. We then confront the testable empirical implications with two sets of data.

PD January 1991. TI The Politics of 1992: Fiscal Policy and European Integration. AU Persson, Torsten; Tabellini, Guido. AA Persson: University of California, Berkeley. Tabellini: Institute for Economic Research, Italy. SR Centre for Economic Policy Research Discussion Paper: 501; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 32. PR 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. JE F11, F21, H21, E63, D72. KW Capital Mobility. Fiscal Policy. Taxes. Political Economy. Government Policy. Europe.

AB The internal market in Europe will greatly increase the international mobility of resources. How will this affect fiscal policy in different countries? We first consider taxation of capital in a two-country model, where a democratically-chosen government in each country chooses tax policy. Higher capital mobility changes the politico-economic equilibrium in two ways. On one hand, it leads to more tax competition between the countries: this "political effect" offsets the increased tax competition, although not completely. We then consider taxation of labor, in a model where labor is internationally immobile. Eliminating the remaining barriers to trade in goods changes the distribution of labor earnings in the model, which again has a political as well as an economic effect. Again the economic and political effects push the tax rates in different directions, but here the political effect can prevail. The tendency for an adapting political equilibrium to preserve the status quo emerges as a general result of the paper.

Pesaran, M. Hashem

PD May 1990. TI A Simple, Non-Parametric Test of Predictive Performance. AU Pesaran, M. Hashem; Timmermann, Alan G. AA Pesaran: University of California, Los Angeles and Trinity College, Cambridge. Timmermann: University of California, Los Angeles. SR University of

Cambridge DAE Working Paper: 9021; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 9. PR \$4.00 (2.00 pounds) checks payable to University of Cambridge. JE C14, E17. KW Nonparametric test. Forecasting. Dynamic Model. Expectations.

AB This paper develops a distribution-free procedure for testing the accuracy of forecasts when the focus of the analysis is on the correct prediction of the direction of change in the variable under consideration. The proposed test is of particular interest in situations where the underlying probability distribution of forecasts is difficult to derive analytically as in large nonlinear dynamic macroeconomic models, or when the forecasts are made available only in the form of qualitative data as in most surveys on expectations.

PD July 1990. TI The Statistical and Economic Significance of the Predictability of Excess Returns on Common Stocks. AU Pesaran, M. Hashem; Timmermann, Alan G. AA Pesaran: University of California, Los Angeles and Trinity College, Cambridge. Timmermann: University of California, Los Angeles. SR University of Cambridge DAE Working Paper: 9022; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 54. PR \$4.00 (2.00 pounds) checks payable to University of Cambridge. JE G11, G12. KW Excess Returns. Common Stocks. Market Portfolios. Stock Market.

AB This paper presents new evidence on the predictability of excess returns on common stocks for four different portfolios (namely the Standard and Poor's 500, the Dow Jones industrial, the value weighted and the equal weighted CRSP portfolios) at annual and quarterly frequencies. It shows that the recursive predictions obtained on the basis of the excess returns' regressions are capable of correctly predicting a statistically significant proportion of the signs of the actual returns. This result is found to be particularly strong in the case of the SP 500 portfolio. The paper also shows that the switching portfolios constructed on the basis of the signs of the recursive predictions mean-variance dominate the respective market portfolios for all the four portfolios under consideration. This result continues to hold even under a high transaction cost scenario.

PD August 1990. TI Persistence, Cointegration and Aggregation: A Disaggregated Analysis of Output Fluctuations in the U.S. Economy. AU Pesaran, M. Hashem; Pierse, R. G.; Lee, K. C. AA Pesaran: University of California, Los Angeles and Trinity College, Cambridge. Pierse and Lee: University of Cambridge. SR University of Cambridge DAE Working Paper: 9020; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG 51. PR \$4.00 (2.00 pounds) checks payable to University of Cambridge. JE E23, E32, E51. KW Shocks. Output. Economic Fluctuations. Business Cycle. Macroeconomic Model.

AB The paper develops a suitable framework for the measurement of persistence of shocks to aggregate output in the context of a multisectoral model. It argues that the persistence of shocks to aggregate output can be estimated more precisely using a disaggregated model of output growth rather than univariate representations of real GNP. The paper also analyzes the effect of co-integration among the sectoral output series on the persistence measure and provides a decomposition of the persistent effect of output innovations into

"monetary" and "other" shocks. Finally, the paper applies the disaggregate framework to the analysis of output growth in the U.S. economy, and shows that despite the statistical significance of "money" shocks on output growths, their contribution to the total persistence of output fluctuations is relatively unimportant.

Pessach, Shula

PD March 1991. **TI** Targeting the Exchange Rate: An Empirical Investigation. **AU** Pessach, Shula; Razin, Assaf. **AA** Pessach: Bank of Israel and New York University. Razin: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 3662; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** F31, F41, E31. **KW** Exchange Rates. Open Economy. Inflation.

AB The purpose of this paper is to implement empirically a variant of the new theory of exchange rate targeting, suitable for high inflation small open economies. The theory formulates an expectations induced relationship between the exchange rate and the fundamental subject to random shocks and target zone constraints on rates of depreciation. The empirical analysis identifies the roles played by policy and market fundamentals in foreign exchange markets, and estimate the key parameters of the exchange rate dynamic equation.

Pestieau, Pierre

PD May 1990. **TI** Tax Evasion and Occupational Choice. **AU** Pestieau, Pierre; Possen, Uri M. **AA** Pestieau: Universite de Liege and Universite Catholique de Louvain. Possen: Cornell University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9033; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 19. **PR** not available. **JE** H26, J24, H21, J21. **KW** Taxes. Occupation. Risk. Tax Policy. Tax Evasion. Self-Employment. Entrepreneurs.

AB This paper is concerned with the combined effect of tax compliance and tax audit policy on the occupational choice of individuals and on public policy objectives such as tax revenue, total production, and social welfare. Individuals are assumed to have a choice between riskless work and a risky entrepreneurial occupation. They are only differentiated according to their attitudes towards risk. More risk averse individuals go into the safe occupation and less risk averse people become entrepreneurs. Tax evasion is only accessible to the latter and therefore its control tends to discourage risk taking. Whether control of tax evasion is desirable for the economy as a whole depends on the objective function of the government. It is shown that tax audit policy has conflicting effects on tax revenue, per capita income, and social welfare.

TI Pay-As-You-Go Social Security in a Changing Environment. **AU** Boadway, Robin; Marchand, Maurice; Pestieau, Pierre.

TI Optimal Intergenerational Transfers in a Growth Model with Fertility and Productivity Changes. **AU** Marchand, Maurice; Michel, Philippe; Pestieau, Pierre.

PD November 1990. **TI** Assessing the Performance of Public Sector Activities: Some Recent Evidence from the Productive Efficiency Viewpoint. **AU** Pestieau, Pierre; Tulkens, Henry. **AA** Pestieau: Universite Catholique de Louvain and Universite de Liege. Tulkens: Universite Catholique de Louvain. **SR** Universite Catholique de

Louvain CORE Discussion Paper: 9060; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 58. **PR** not available. **JE** L32. **KW** Public Enterprises. Public Sector. Efficiency.

AB From a general discussion of the notion of economic performance as applied to public enterprises, we first observe that productive efficiency is the least ambiguous and most generally desirable form of performance for such firms. We then summarily develop the ideas on which rest the prevailing methods of efficiency measurement, and we review in tableau form a large number of empirical efficiency studies bearing on various public sector activities in the western world. Next, we present in more detail two specific original studies: one on European railroads that illustrates the parametric approach, and another one on retail banking, illustrating nonparametric techniques. In conclusion, we offer some evaluative remarks on the role of efficiency measurement in public sector economies.

Petit, Pascal

PD 1990. **TI** New Technology and Measurement of Services: The Case of Financial Services. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9031; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 24. **PR** 20 F. **JE** G21, L86, O31. **KW** Banking. Information Services. Technology.

AB Measurement in real terms of some services raises many questions which stem from the characteristics of user/producer relationships in these activities. Innovations induced by the development of information technologies transform these relationships and therefore partly ease the distinction between quite measurable productions and more collective-like ones. The present study focuses on banking activities to follow the various steps of these changes in product definition and stresses its consequences regarding measurement issues.

TI The Diffusion of Interdependent Innovations in the Textile Industry. **AU** Antonelli, Cristiano; Petit, Pascal; Tahar, Gabriel.

Philippopoulos, Apostolis

TI Insider Power, Employment Dynamics and Multiple Inflation Equilibria. **AU** Lockwood, Ben; Philippopoulos, Apostolis.

Phillips, Llad

PD January 1991. **TI** Stabilization of the Canadian Dollar: 1975-1986. **AU** Phillips, Llad; Pippenger, John. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 19-90; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. **PG** 27. **PR** no charge. **JE** E61, F31. **KW** Canada. Exchange Rate. Government Policy.

AB We use daily data to evaluate relative merits of stock and flow models of official intervention in the market for Canadian dollars. Flow models perform at least as well as stock. We also examine the effects of leaning against the wind. Both models imply that lagged responses to changes in exchange rates amplify short-run fluctuations. Stock models imply contemporaneous reactions reduce short-run and long-run fluctuations while flow models imply reductions in only short-run fluctuations.

Phylaktis, Kate

TI The Fisher Hypothesis in Two High, Inflation Economies.
AU Blake, David; Phylaktis, Kate.

Picard, Pierre

TI On Precommitment Effects between Competing Agencies. **AU** Caillaud, Bernard; Jullien, Bruno; Picard, Pierre.

Pierse, R. G.

TI Persistence, Cointegration and Aggregation: A Disaggregated Analysis of Output Fluctuations in the U.S. Economy. **AU** Pesaran, M. Hashem; Pierse, R. G.; Lee, K. C.

Pines, David

TI Migration with Fiscal Externalities. **AU** Hercowitz, Zvi; Pines, David.

Pippenger, John

PD November 1990. **TI** Testing Purchasing Power Parity for Cointegration. **AU** Pippenger, John; Mastroiannis, Tasos. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 18-90; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. **PG** 24. **PR** no charge. **JE** F31, E31. **KW** Purchasing Power Parity. Price Levels.

AB Co-integration tests of PPP yield mixed results. We examine two possible sources for these mixed results: measurement error due to different weights in price indexes, and the inability of standard tests to distinguish between weak and no co-integration. Results suggest the problem lies with the tests for co-integration. Our results also indicate that exchange rates and relative price levels are co-integrated, but that the error correction is weak.

TI Stabilization of the Canadian Dollar: 1975-1986. **AU** Phillips, Llad; Pippenger, John.

Pischke, Jorn-Steffen

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

Pissarides, Christopher

PD November 1990. **TI** Macroeconomic Adjustment and Poverty in Selected Developed Countries. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 13; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 49. **PR** no charge. **JE** I32, E32, J65. **KW** Poverty. Business Cycle. Unemployment. Transfer Program. Welfare Program.

AB This paper studies the effect of the business cycle on poverty, drawing evidence from the United States, Great Britain, Sweden and Australia. Many of the poor in those countries are outside the labor market and for those inside, transfers are a large part of income. But unemployment and wage reductions in recession still increase poverty. Major causes of poverty are unemployment in Great Britain and Australia and low wages in the United States. Similar relations are observed in Sweden but a vast transfer program has

virtually eliminated poverty. The paper concludes with an examination of the policy options for combating the poverty caused by recession.

TI Labor Market Policies and Unemployment in the OECD. **AU** Jackman, Richard; Pissarides, Christopher; Savouri, Savvas.

PD November 1990. **TI** Who are the Unemployed? **AU** Pissarides, Christopher; Wadsworth, Jonathan. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 12; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 40. **PR** no charge. **JE** J64, J24, J63. **KW** Unemployment. Occupational Choice.

AB This paper provides an analysis of the incidence of unemployment in Britain between 1979 and 1986. Using Labour Force Survey data, we attempt to quantify the extent to which different groups in the population are exposed to differential unemployment risk. We find strong evidence that unemployment incidence is dependent upon individual characteristics. The most important indicator of potential unemployment is a person's occupation. Recurrent and long-term unemployment states are over-represented with manual workers.

Pittis, Nikitas

TI Pricing and Product Market Structure in Open Economies. **AU** Alogoskoufis, George S.; Martin, Chris; Pittis, Nikitas.

TI Pricing and Product Market Structures in Open Economies: An Empirical Test. **AU** Alogoskoufis, George S.; Martin, Chris; Pittis, Nikitas.

Polinsky, A. Mitchell

PD February 1991. **TI** Decoupling Liability: Optimal Incentives for Care and Litigation. **AU** Polinsky, A. Mitchell; Che, Yeon-Koo. **AA** Stanford University. **SR** National Bureau of Economic Research Working Paper: 3634; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** \$2.00. **JE** K13, K41. **KW** Liability. Moral Hazard. Legal System. Settlement.

AB A "decoupled" liability system is one in which the award to the plaintiff differs from the payment by the defendant. The optimal system of decoupling makes the defendant's payment as high as possible. Such a policy allows the award to the plaintiff to be lowered, thereby reducing the plaintiff's incentive to sue -- and hence litigation costs -- without sacrificing the defendant's incentive to exercise care. The optimal award to the plaintiff may be less than or greater than the optimal payment by the defendant. The possibility of an out-of-court settlement does not qualitatively affect these results. If the settlement can be monitored, it may be desirable to decouple it as well.

Pollack, Robert A.

TI The CET-CES-Generalized Leontief Variable Profit Function: An Application to Indian Agriculture. **AU** Behrman, Jere R.; Lovell, C. A. Knox; Pollack, Robert A.; Sickles, Robin C.

Popper, Helen

PD September 1990. **TI** International Capital Mobility: Direct Evidence from Long-Term Currency Swaps. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 386; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 24. **PR** no charge. **JE** F21, F14. **KW** Interest Parity. Capital Mobility. Currency Swaps. International Investment.

AB This paper provides direct measures of the international mobility of long-term financial capital using interest arbitrage conditions previously applied only to short-term assets. Long-term arbitrage conditions are constructed using a now well-developed mechanism for hedging long-term currency positions, the currency swap. Asset returns are compared in the Euromarket and in the onshore markets of Canada, Japan, Germany, Switzerland, the United Kingdom and the United States. The evidence, discussed below, indicates that long-term financial capital is as mobile across these markets as is short-term capital. This appears to be the case both within the Euromarket and across political jurisdictions.

Portes, Richard

PD January 1991. **TI** The Transition to Convertibility for Eastern Europe and the USSR. **AA** Birkbeck College. **SR** Centre for Economic Policy Research Discussion Paper: 500; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 17. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, E63, P35, P52. **KW** Currency. Foreign Exchange. Convertibility. Exchange Rate. Socialism. Economic Reforms.

AB This paper discusses when and how to introduce foreign exchange convertibility in the process of transformation of the socialist centrally-planned economies into market economies based on private property. It elucidates the need for robust sequencing in a program of economic reforms and the importance of establishing the credibility of the program. It then discusses why convertibility is so important in the sequence, and it goes on to deal with implementation and exchange rate policy. Macroeconomic stabilization is treated as a central issue in the strategy for achieving convertibility. Finally, the paper comments on alternative sequences and the role of external financial support for convertibility.

Possen, Uri M.

TI *Tax Evasion and Occupational Choice*. **AU** Pestieau, Pierre; Possen, Uri M.

Postlewaite, Andrew

TI Rational Expectations and Stock Market Bubbles. **AU** Allen, Franklin; Postlewaite, Andrew.

TI Asymptotic Efficiency in Large Exchange Economies with Asymmetric Information. **AU** Gul, Faruk; Postlewaite, Andrew.

Poterba, James M.

TI Investor Diversification and International Equity Markets. **AU** French, Kenneth R.; Poterba, James M.

PD January 1991. **TI** Is the Gasoline Tax Regressive? **AA** Massachusetts Institute of Technology. **SR** National

Bureau of Economic Research Working Paper: 3578; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** H24, H23, H21. **KW** Gasoline. Taxes. Tax Policy.

AB Claims of the regressivity of gasoline taxes typically rely on annual surveys of consumer income and expenditures which show that gasoline expenditures are a larger fraction of income for very low income households than for middle or high-income households. This paper argues that annual expenditure provides a more reliable indicator of household well-being than annual income. It uses data from the Consumer Expenditure Survey to reassess the claim that gasoline taxes are regressive by computing the share of total expenditures which high-spending and low-spending households devote to retail gasoline purchases. This alternative approach shows that low-expenditure households devote a smaller share of their budget to gasoline than do their counterparts in the middle of the expenditure distribution.

PD March 1991. **TI** Tax Policy to Combat Global Warming: On Designing a Carbon Tax. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 3649; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** \$2.00. **JE** H23, Q25, H21. **KW** Taxes. Pollution. Conservation. Environment.

AB This paper develops several points concerning the design and implementation of a carbon tax. First, if implemented without any offsetting changes in transfer programs, the carbon tax would be regressive. This regressivity could be offset with changes in either the direct tax system or transfers. Second, the production and consumption distortions associated with small carbon taxes, on the order of \$5/ton of carbon, are relatively small, however, stabilizing carbon dioxide emissions at their 1988 levels by the year 2000 would require a carbon tax ten to twenty times this size. Third, a central issue of carbon tax design is harmonization with other fiscal instruments designed to reduce greenhouse warming.

Pradel, Jeanine

TI Credit Granting and Determination of Interest Rates. **AU** Fourageaud, Claude; Gourieroux, Christian; Pradel, Jeanine.

Pradhan, Mahmood

TI Debt-Equity Swaps as Bond Conversions: Implications for Pricing. **AU** Blake, David; Pradhan, Mahmood.

Prescott, Edward C.

TI The Econometrics of the General Equilibrium Approach to Business Cycles. **AU** Kydland, Finn E.; Prescott, Edward C.

TI Seigniorage as a Tax: A Quantitative Evaluation. **AU** Imrohroglu, Ayse; Prescott, Edward C.

TI Technology Adoption and Growth. **AU** Parente, Stephen L.; Prescott, Edward C.

Preston, Ian

PD July 1990. **TI** Income Redistribution and Labour Supply Specification. **AA** Nuffield College, Oxford and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/14; Institute for Fiscal Studies, 7

Ridgmount Street, London WC1E 7AE, ENGLAND. PG 34. PR 3 pounds. JE D31, H21, J22. KW Income Distribution. Labor Supply. Taxes.

AB General results on the impact of tax progression upon the distribution of income and other variables are derived and used to appraise the appropriateness of particular forms for labor supply functions in empirical investigation of the issue. It is shown that use of certain specifications could amount to prejudging the direction of impact (even possibly in a perverse direction) under a wide class of criteria for assessment of inequality. CES preferences are identified as a functional form allowing a reasonable degree of flexibility in response and published parameter estimates are used to assess the likelihood that labor supply responses could substantially undermine the direction of redistribution. Little indication of such an effect is found using a model with an affine tax function and wage differences as the underlying source of variation. Extensions to this framework are considered.

TI The Distinction between Income and Consumption in the Measurement of Household Welfare. AU Blundell, Richard; Preston, Ian.

Primont, Diane F.

PD May 1990. TI Comparing Prices across Cities: A Hedonic Approach. AU Primont, Diane F.; Kokoski, Mary F. AA Bureau of Labor Statistics. SR Bureau of Labor Statistics Working Paper: 204; Bureau of Labor Statistics, 441 "G" Street N.W. Room 2126, Washington, D.C. 20212. PG 33. PR no charge. JE C81, C82, E31, C43. KW Prices. Price Index. Consumer Price Index. Aggregation. Hedonic Model.

AB Vast amounts of price data are collected across the nation to construct the Consumer Price Index (CPI), a measure of intertemporal price comparisons. However, due to the sample design of the CPI, different items and/or quality of items are priced across outlets and across cities. Thus, a conventional index number formula, such as the Laspeyres used in the CPI, cannot be used to make interspatial price comparisons at a point in time. Using hedonic regression techniques and an aggregation method developed by Elteto, Koves, and Szulc, however, multilateral interarea indices can be produced from these data. Having selected a highly heterogeneous commodity group, professional medical services, both bilateral and multilateral indices are computed which compare the relative price of this set of services across thirty-four cities and twelve region/city-size-class areas.

PD January 1991. TI Differences in Food Prices across U.S. Cities: Evidence from CPI Data. AU Primont, Diane F.; Kokoski, Mary F. AA Bureau of Labor Statistics. SR Bureau of Labor Statistics Working Paper: 209; Bureau of Labor Statistics, 441 "G" Street N.W., Room 2126, Washington, D.C. 20212. PG 30. PR no charge. JE Q11, C81, C82, C43. KW Price Index. Agriculture. Prices. Consumer Price Index.

AB Interest in interarea price variation is motivated by both practical reasons, such as relocation and salary differentials, and for research in consumer demand. This paper employs the price quotes from the CPI data base to construct interarea consumer price indices for forty-four geographic areas in the U.S. for food-at-home. Because it is based on a probability sample, the CPI collects data on somewhat different products in different outlets and areas, making direct interarea comparisons

of price quotes impossible. Through the use of hedonic regression, in the form of the County Product Dummy model, however, interarea indices can be obtained from these data. These indices, which are bilateral in nature, can be aggregated into a set of multilateral price indices by using the EKS method. The multilateral indices, which are independent of the choice of a reference area, are presented for all food-at-home, and for the five major groups of food-at-home (cereal and bakery products; meat, poultry, fish, and eggs; dairy; fruits and vegetables; and other food at home). The resulting index values are evaluated in terms of expected patterns of interarea variation.

Prucha, Ingmar R.

PD April 1991. TI Endogenous Capital Utilization and Productivity Measurement in Dynamic Factor Demand Models: Theory and an Application to the U.S. Electrical Machinery Industry. AU Prucha, Ingmar R.; Nadiri, M. Ishaq. AA Prucha: University of Maryland. Nadiri: New York University. SR National Bureau of Economic Research Working Paper: 3680; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 61. PR \$2.00. JE D24, E22, L63. KW Capital Utilization. Factor Demand Model. Factor Productivity. Depreciation. Capital Stock.

AB Studies of the firm's demand for factor inputs often assume a constant rate of utilization of the inputs and ignore the fact that the firm can simultaneously choose the level and the rate of utilization of its inputs. In particular, the literature on dynamic factor demand models has, until recently, largely overlooked the issue of capital utilization and/or did not distinguish carefully between the distinct concepts of capital and capacity utilization. In this paper we allow for variations in the rate of capital utilization within the context of a dynamic factor demand model by adopting a modeling framework within which the firm combines its beginning-of-period stocks with other inputs to produce its outputs as well as its end-of-period stocks. We also derive measures of productivity and capacity utilization for the adopted measures of productivity.

Psaradakis, Zacharias G.

PD February 1991. TI Modeling the Structure of Wage and Price Determination in Greece. AA University of Southampton. SR University of Southampton Discussion Paper in Economics and Econometrics: 9102; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. PG 49. PR no charge. JE E32, C51, C52. KW Wages. Prices. Model Specification. Time Series.

AB This paper attempts the empirical modeling of wage and price determination in Greece, along the lines of a recently proposed strategy for modeling nonstationary time series with common stochastic trends. After a thorough examination of the univariate integration properties of the data, maximum likelihood co-integration methods are employed to determine the dimension of the co-integration space and estimate any long-run relationships among the series. A closed structural model is then estimated, which is shown to be data coherent and able to parsimoniously encompass a congruent VAR representation of the data incorporating the relevant long-run information.

Qin, Cheng-Zhong

PD August 1990. **TI** The Inner Core and the Strongly Inhibitive Set. **AA** Universite Catholique de Louvain and University of California, Santa Barbara. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9045; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 13. **PR** not available. **JE** D51, C70, C62. **KW** Market Games. Core. Competitive Equilibrium. Coalition.

AB The inner core, motivated by the study of competitive outcomes in the cores of market games, is shown to be contained on the strongly inhibitive set, and coincides with the strongly inhibitive set for a large class of games.

PD October 1990. **TI** An Inner Core Equivalence Theorem. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 12-90; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. **PG** 11. **PR** no charge. **JE** D51, D61. **KW** Core. Inner Core. Competitive Equilibrium. Exchange Economies. General Equilibrium Theory.

AB We make an extension of the concept of the inner core of finite economies and games to large economies and games. We then establish an inner core equivalence theorem for pure exchange economies with a continuum of traders.

PD February 1991. **TI** The Inner Core of an N-Person Game. **AA** University of California at Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 4-91; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. **PG** 18. **PR** no charge. **JE** C70, D50. **KW** N-Person Game. NTU. Game Theory.

AB In this paper sufficient conditions for games to have nonempty inner cores are established, and its properties are analyzed. The key condition is shown to be close to the balancedness condition, and hence it characterizes a class of NTU games that is even larger than the class of NTU games which are balanced with slack.

Radaelli, Giorgio

PD April 1990. **TI** The Effectiveness of Capital Controls: An Empirical Analysis on the EMS. **AA** Birkbeck College. **SR** Birkbeck College Discussion Paper in Economics: 16/90; Birkbeck College, Department of Economics, 7/15 Gresse St., London W1P 1PA, ENGLAND. **PG** 29. **PR** no charge. **JE** F21, F33, F36. **KW** Capital Controls. European Monetary System. Balance of Payments. Capital Flows.

AB The often held view that capital controls are necessary to the stability of the EMS is weakened by the lack of evidence on the impact of controls on capital flows. This study measures such impact by estimating a model which allows for asymmetric effects on capital outflows and inflows while highlighting the relationship between the level of interest rates and the effectiveness of controls. The results suggest that the French and Italian capital controls ceased to bite in 1985. This supports the long-run ineffectiveness of controls while suggesting that no threat to the EMS should come from their removal.

Raffelhueschen, Bernd

TI How Regional Differences in Taxes and Public Goods

Distort Life Cycle Location Choices. **AU** Kotlikoff, Laurence J.; Raffelhueschen, Bernd.

Rappoport, Peter

PD February 1991. **TI** Was there a Bubble in the 1929 Stock Market? **AU** Rappoport, Peter; White, Eugene N. **AA** Rutgers University. **SR** National Bureau of Economic Research Working Paper: 3612; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 35. **PR** \$2.00. **JE** N22. **KW** Stock Market. Great Depression. Dividends. Stock Prices.

AB Standard tests find that no bubbles are present in the stock price data for the last one hundred years. In contrast, historical accounts, focusing on briefer periods, point to the stock market of 1928-1929 as a classic example of a bubble. While previous studies have restricted their attention to the joint behavior of stock prices and dividends over the course of a century, this paper uses the behavior of the premia demanded on loans collateralized by the purchase of stocks to evaluate the claim that the boom and crash of 1929 represented a bubble. We develop a model that permits us to extract an estimate of the path of the bubble and its probability of bursting in any period and demonstrate that the premium behaves as would be expected in the presence of a bubble in stock prices.

Rastogi, Anupam

TI The European Monetary System: Achievements and Survival. **AU** Hallett, Andrew Hughes; Minford, Patrick; Rastogi, Anupam.

Rauch, James E.

PD January 1991. **TI** Reconciling the Pattern of Trade with the Pattern of Migration. **AA** University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 3605; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** \$2.00. **JE** O15, O41. **KW** Human Resources. Economic Development. Economic Growth. Migration. Human Capital.

AB Empirical studies have consistently found that skilled labor abundant countries tend to export skilled-labor intensive manufactured goods. Yet these countries also have higher wages for skilled workers, causing them to be net importers through migration of skilled labor from unskilled labor abundant countries (the "brain drain"). A new explanation is presented for this combination of comparative and absolute advantage in skilled labor abundant countries: if only skilled (educated) individuals can become managers, then given the same underlying distribution of managerial talent the country that is more poorly endowed with skilled labor must use a less talented manager at the margin in order to fully employ its work force.

Ravn, Morten O.

TI Business Cycles in the U.K.: Facts and Fictions. **AU** Blackburn, Keith; Ravn, Morten O.

TI Contemporary Macroeconomic Fluctuations: An International Perspective. **AU** Blackburn, Keith; Ravn, Morten O.

Razin, Assaf

TI Basic Concepts of International Taxation. **AU** Frenkel,

Jacob A.; Razin, Assaf; Efraim, Sadka.

TI Targeting the Exchange Rate: An Empirical Investigation. **AU** Pessach, Shula; Razin, Assaf.

TI International VAT Harmonization: Economic Effects. **AU** Frenkel, Jacob A.; Razin, Assaf; Symansky, Steven.

PD April 1991. **TI** International Tax Competition and Gains from Tax Harmonization. **AU** Razin, Assaf; Sadka, Efraim. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 14-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 17. **PR** no charge. **JE** H21, F21, F15, F41. **KW** Business Taxes. Business Investment. International Investment.

AB In a world economy there are two types of distortions which can be caused by capital income taxation in addition to the standard closed economy wedge between the consumer-saver marginal intertemporal rate of substitution and the producer-investor marginal productivity of capital (i) international differences in intertemporal marginal rates of substitution, implying an inefficient allocation of world savings across countries; and (ii) international differences in the marginal productivity of capital, implying an inefficient allocation of world investment across countries. The paper focuses on the structure of taxation for countries which are engaged in tax competition and on potential gains from a tax harmonization.

Rebello, Sergio

TI Labor Hoarding and the Business Cycle. **AU** Burnside, Craig; Eichenbaum, Martin; Rebello, Sergio.

Rebitzer, James B.

PD January 1991. **TI** Employer Size and Dual Labor Markets. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 3587; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 17. **PR** \$2.00. **JE** J31, J41, J42. **KW** Monitoring. Firm Size. Wages. Labor Markets.

AB Recently developed effort regulation models argue that labor markets are segmented because of differences in the technology of supervision across firms. Primary jobs pay above market clearing wages because these jobs are difficult to monitor. Secondary jobs, in contrast, pose no monitoring difficulties and therefore pay a market clearing wage. If, as the literature suggests, increases in employer size make supervision more difficult, we should observe that wages increase with employer size in primary jobs but not in secondary jobs. We test this hypothesis using a switching regression model. We find evidence of an employer size wage effect in both primary and secondary labor markets. However, consistent with the prediction of effort control models, the size effect on wages is considerably larger in primary than secondary jobs.

PD March 1991. **TI** Work Incentives and the Demand for Primary and Contingent Labor. **AU** Rebitzer, James B.; Taylor, Lowell J. **AA** Rebitzer: Massachusetts Institute of Technology and National Bureau of Economic Research. Taylor: Carnegie Mellon University. **SR** National Bureau of Economic Research Working Paper: 3647; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** \$2.00. **JE** J41, J21, J23, E24.

KW Labor Demand. Employment. Wages. Labor Force.

AB This paper presents an incentive-based dual labor market model. Three implications of the model are emphasized. First, in equilibrium there is an excess supply of workers to primary jobs. Second, when demand is uncertain, firms may choose a mix of primary and contingent workers to perform the same job, even when these workers are perfect substitutes in production. Third, firms prefer to hire into primary jobs workers with strong job attachment and workers whose preferences lead them to prefer long work hours. We argue that industries with high proportions of part-time workers will tend to have large concentrations of contingent workers. The empirical finding that the wages and benefits of full-time workers are significantly reduced in industries with large concentrations of part-time workers appears consistent with this hypothesis.

Reichlin, Pietro

PD August 1990. **TI** Endogenous Cycles with Long Lived Agents. **AA** not available. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9048; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 29. **PR** not available. **JE** D91, D11. **KW** Overlapping Generations Model. Consumption. Consumer Economics.

AB In this paper I present a pure exchange overlapping generations model where a two period deterministic cycle may exist even if agents have possibly arbitrarily long lifespans and perfect foresight. The basic model is borrowed from Yaari's (1965) uncertain-lifetime setup of the individual's consumption decision where agents' probability of death is a constant p . The conditions under which periodic cycles can be shown to exist with agents having arbitrarily long life spans are connected with the existence of a high enough degree of relative risk aversion and discounting of agents' future utilities. Moreover, the sequence of lifetime individual endowments cannot be monotonically increasing or constant. Reasons for which the results of this model are at variance with recent contributions by Ayiagari (1988, 1989) are also discussed.

PD October 1990. **TI** Government Debt and Equity Capital in an Economy with Credit Rationing. **AU** Reichlin, Pietro; Siconolfi, Paolo. **AA** Reichlin: Universita di Roma. Siconolfi: Columbia University. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9064; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 41. **PR** not available. **JE** H31, H32, H63. **KW** Public Debt. Consumption. Portfolio Choice. Capital Structure. Credit.

AB We characterize the set of stationary monetary equilibria of a simple overlapping generations economy with production where, because of bankruptcy risk and adverse selection, there exists a credit rationing equilibrium (in the sense of Stiglitz-Weiss (1981)). We find that government domestic debt may affect individuals' portfolio allocations and private consumption by modifying firms capital structure (the average firms debt-equity ratio) and, through this, stock returns and the level of risk to equity capital.

Reinganum, Jennifer

TI Expert Opinions and Taxpayer Compliance: A Strategic Analysis. **AU** Graetz, Michael A.; Reinganum, Jennifer; Wilde, Louis L.

Reinsdorf, Marshall B.

PD February 1991. **TI** New Evidence on the Relation between Inflation and Price Dispersion. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 210; Bureau of Labor Statistics, 441 "G" Street N.W., Room 2126, Washington, D.C. 20212. **PG** 32. **PR** no charge. **JE** E31, Q11, D41. **KW** Inflation. Prices. Agriculture. Price Distribution.

AB The relation between inflation and price dispersion is examined using U.S. micro-level data on retail food prices during a period including the Volker disinflation of 1981-1982. Contrary to the direct relation that is widely presumed to exist between these variables, in the markets examined the relation between inflation and price dispersion is found to be an inverse one. This finding can be explained as a result of consumers' imperfect information about the location of price distributions leading to incomplete adjustment of their reservation prices in the short-run when inflation rates change. The data do not appear to be consistent with predictions of simple menu cost models.

Reny, Philip J.

TI A Stone-Weierstrass Theorem without Closure under Suprema. **AU** McAfee, R. Preston; Reny, Philip J.

Reynaud, Benedicte

PD January 1990. **TI** Wage Schemes and Labor Relations. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9001; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 52. **PR** 25 F. **JE** J31, J53, J41. **KW** Labor Relations. Incentives. France. Wage Structure. Hierarchy.

AB In order to get a certain degree of intensity and quality of work, monetary incentives or hierarchical organization within the firm are two concurrent devices. We show, in a first part, that this theoretical substitutability is only verified in the case of the wage payment by results (individual or collective). Some non-incentive wage systems (without bonus) are positively correlated with a weak hierarchical organization. These results are based on econometrical methods applied on individual data (statistics of the structure of wages, manual workers. France, INSEE, 1986). The second part of the article focuses on a characterization of the capital/labor relations, brought by the wage schemes.

PD September 1990. **TI** Corporate Strategies and Wage-Setting: The French Case (1978-1986). **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9021; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 18. **PR** 20 F. **JE** J33, J31, J53, M12. **KW** Labor Relations. Wages. France.

AB Part I attempts to show the way in which each remuneration method contributes to the shaping of a given configuration of the wage-setting relationship. Part II tries to identify the source of these wages forms and in particular, to identify the respective rules of the individual firm and sector. Part III examines the reasons prompting firms to change the remuneration method. A test is made of the hypothesis that the economic and financial situation of firms had an impact on these changes during the crisis. These problems are examined on the basis of the French section of the 1978 and 1986 surveys of the structure of wages in the EEC.

PD October 1990. **TI** Which Wage Forms for the Years

1990? An Approach in Terms of Regulation Theory. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9022; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 40. **PR** 20 F. **JE** J33, J31, J53, M12, M14. **KW** Compensation. Wages. Labor Relations. Wage Structure.

AB The contribution contains two parts: the first part studies the structural links between modes of remuneration and wage relations. In this context two questions will be examined: first, the way in which modes of remuneration contribute to shaping a configuration of wage relations will be studied. We qualify five configurations of wage relations: simple control of non-skilled workers, simple control of skilled workers, Taylorist technical control, fordist control and bureaucratic control. Secondly, we will show that the size of the enterprise, labor organization and the sector are the main factors structuring these configurations. The second part is dedicated to the analysis of recent inventions and rediscoveries in the formation of wages.

Riezman, Raymond G.

PD February 1990. **TI** Dynamic Tariffs with Asymmetric Information. **AA** California Institute of Technology and University of Iowa. **SR** Caltech Social Science Working Paper: 720; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 22. **PR** no charge. **JE** F13, F14, F11. **KW** Tariffs. Commercial Policy. Trade Model. Protectionism.

AB Recent work in game theory has demonstrated how cooperative outcomes can be sustained when the game is played repeatedly, defectors are punished, but agents play noncooperatively. This methodology is applied here to determine when two countries can sustain free trade given that they determine trade policies noncooperatively. We focus on the role of asymmetric information. Countries have private information about the extent of their own protection, but the overall level of protection can be thought of as private information. Therefore, any agreement to eliminate or reduce tariffs is limited by the fact that countries can cheat on the agreement by using non-observable forms of protection.

PD February 1990. **TI** Worldwide Persistence, Business Cycles, and Economic Growth. **AU** Riezman, Raymond G.; Whiteman, Charles H. **AA** Riezman: California Institute of Technology and University of Iowa. Whiteman: University of Iowa. **SR** Caltech Social Science Working Paper: 719; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 18. **PR** no charge. **JE** E32, O41. **KW** Business Cycle. Economic Growth. Endogenous Growth.

AB We study the time series properties of aggregate data drawn from the Penn World Tables using numerical Bayesian procedures which facilitate inference with small samples. We find substantial persistence in world aggregates, and some evidence for a world business cycle. Across economies, there is great dispersion in our measure of persistence of shocks to real gross domestic product. That we also find no evidence of a relationship between growth and persistence sheds light on which of two competing models of endogenous growth is likely to be able to explain the PWT data.

TI Voter Preferences for Trade Policy Instruments. **AU** Mayer, Wolfgang; Riezman, Raymond G.

Rivera-Batiz, Luis A.

PD January 1991. **TI** International Trade with Endogenous Technological Change. **AU** Rivera-Batiz, Luis A.; Romer, Paul M. **AA** Rivera-Batiz: University of California, San Diego. Romer: National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3594; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 45. **PR** \$2.00. **JE** F13, F14, F01, O34. **KW** Economic Growth. Trade Policy. Free Trade. Property Rights.

AB To explain why trade restrictions sometimes speed up worldwide growth and sometimes slow it down, we exploit an analogy with the theory of consumer behavior. Substitution effects make demand curves slope down, but income effects can increase or decrease the slope, and can sometimes overwhelm the substitution effect. We decompose changes in the worldwide growth rate into two effects (integration and redundancy) that unambiguously slow down growth, and a third effect (allocation) that can either speed it up or slow it down. We study two types of trade restrictions to illustrate the use of this decomposition. The first is across the board restrictions on traded goods in an otherwise perfect market. The second is selective protection of knowledge-intensive goods in a world with imperfect intellectual property rights.

Rockenbach, Bettina

PD October 1990. **TI** The Negotiation Agreement Area: Data Supplement. **AU** Rockenbach, Bettina; Uhlich, Gerald. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: B-164; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 133. **PR** no charge. **JE** C92, C70. **KW** Two-Person Characteristic Game. Experimental Economics.

AB This data supplement contains the data gained by six experiments of two-person characteristic function games. The experiments were conducted in 1988 and 1989 at the Bonn Laboratory of Experimental Economics. A complete description of the experiments and an evaluation of the data can be found in: Rockenbach, B. & Uhlich, G.R. (1989) "The Negotiation Agreement Area: An Experimental Analysis of Two-Person Characteristic Function Games", SFB 303, Universitat Bonn, Discussion Paper No. B-126, and Uhlich, G.R. (1990) "Descriptive Theories of Bargaining: An Experimental Analysis of Two- and Three-Person Characteristic Function Bargaining", Springer Lecture Notes in Economics and Mathematical Systems, Springer-Verlag Berlin Heidelberg.

Rodrik, Dani

TI Political-Economy Arguments for a Uniform Tariff. **AU** Panagariya, Arvind; Rodrik, Dani.

TI Distributive Politics and Economic Growth. **AU** Alesina, Alberto; Rodrik, Dani.

Roe, Terry

TI Political Economy of Endogenous Growth. **AU** Mohtadi, Hamid; Roe, Terry.

Roemer, John E.

PD February 1991. **TI** Would Economic Democracy Decrease the Amount of Public Bads? **AA** University of

California at Davis. **SR** University of California at Davis Economics Department Working Paper: 376; Department of Economics, University of California at Davis, Davis, California 95616-8578. **PG** 25. **PR** no charge. **JE** D71, P51, D62. **KW** Democracy. Median Voter. Socialism. Externalities.

AB Socialists and economic democrats have often argued that increased economic democracy would decrease the amount of public bads (e.g., pollution and war). An argument for the claim is proposed and modeled. There is a single firm, owned privately by citizens, producing a private good. Its profits are increasing in some public bad (pollution emitted, or a war conducted to lower the price of an imported input the firm uses). Citizens have identical utility functions over the private good and the public bad. The firm's shareholders vote on the level at which the public bad should be set, and an equilibrium in the economy ensues. It is shown that, under certain conditions depending on the characteristics of the economy (preferences and the profit function), and if the distribution of the firm ownership is sufficiently inegalitarian, then a more egalitarian distribution of ownership of the firm implies a lower level of the public bad. It is not true, however, that the chosen level of the public bad is monotone decreasing in the degree of inequality of ownership.

Rogerson, Richard

TI Homework in Macroeconomics: Household Production and Aggregate Fluctuations. **AU** Benhabib, Jess; Rogerson, Richard; Wright, Randall.

TI A Note on Labor Contracts with Private Information and Household Production. **AU** Nosal, Ed; Rogerson, Richard; Wright, Randall.

Rogoff, Kenneth

TI The EMS, the EMU, and the Transition to a Common Currency. **AU** Froot, Kenneth A.; Rogoff, Kenneth.

Roland, Gerard

TI The Virtues of Gradualism and Legitimacy in the Transition to a Market Economy. **AU** Dewatripont, Mathias; Roland, Gerard.

Rolin, Jean-Marie

TI Weak Conditional Independence and Relative Invariance in Bayesian Statistics. **AU** Florens, Jean-Pierre; Mouchart, Michel; Rolin, Jean-Marie.

Romer, Paul M.

TI International Trade with Endogenous Technological Change. **AU** Rivera-Batiz, Luis A.; Romer, Paul M.

Rose, Andrew K.

TI Is the EMS the Perfect Fix? An Empirical Exploration of Exchange Rate Target Zones. **AU** Flood, Robert P.; Rose, Andrew K.; Mathieson, Donald J.

PD November 1990. **TI** Why Has Trade Grown Faster Than Income. **AA** University of California at Berkeley. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 390; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 17. **PR** no charge. **JE** F14, F43, F41. **KW** International Trade. Open Economy. Economic Growth.

AB Trade of the OECD countries has grown faster than income during the postwar period. This paper tests a number of different hypotheses for the observed growth in the trade/income ratio. For small open economies, increases in real output and international reserves, as well as declines in tariff rates are associated with growth in the ratio. There are important differences in the behavior of the trade ratio across time and country size.

TI An Empirical Exploration of Exchange Rate Target-Zones. **AU** Flood, Robert P.; Rose, Andrew K.; Mathieson, Donald J.

PD April 1991. **TI** Expected and Predicted Realignments: The FF/DM Exchange Rate during the EMS. **AU** Rose, Andrew K.; Svensson, Lars E. O. **AA** Rose: University of California at Berkeley. Svensson: Stockholm University. **SR** National Bureau of Economic Research Working Paper: 3685; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** \$2.00. **JE** F31, F33, E42. **KW** Exchange Rates. Devaluation. Interest Rates. European Monetary System.

AB An empirical model of time-varying realignment risk in an exchange rate target zone is developed. Expected rates of devaluation are estimated as the difference between interest rate differentials and estimated expected rates of depreciation within the exchange rate band, using French Franc/Deutsche Mark data during the European Monetary System. The behavior of estimated expected rates of depreciation accord well with the theoretical model of Bertola-Svensson (1990). We are also able to predict actual realignments with some success.

Rosenthal, Howard

TI Testing Game-Theoretic Models of Free Riding: New Evidence on Probability Bias and Learning. **AU** Palfrey, Thomas R.; Rosenthal, Howard.

TI A Model of the Political Economy of the United States. **AU** Alesina, Alberto; Londregan, John; Rosenthal, Howard.

TI Why are there so Many Divided Senate Delegations? **AU** Alesina, Alberto; Fiorina, Morris; Rosenthal, Howard.

Roubini, Nouriel

TI Exchange Rate Volatility in Integrating Capital Markets. **AU** Corsetti, Giancarlo; Grilli, Vittorio; Roubini, Nouriel.

TI Fiscal Deficits, Public Debt and Government Solvency: Evidence from OECD Countries. **AU** Corsetti, Giancarlo; Roubini, Nouriel.

Rutherford, Thomas F.

TI Trade Liberalization in a Multinational-Dominated Industry: A Theoretical and Applied General-Equilibrium Analysis. **AU** Hunter, Linda; Markusen, James R.; Rutherford, Thomas F.

Ruttan, Vernon W.

PD February 1991. **TI** The Future of U.S. Foreign Economic Assistance. **AA** University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 91-2; Department of Agricultural and Applied Economics, 231 Classroom Office Building, University of Minnesota, St. Paul, MN 55108. **PG** 19. **PR** free. **JE** F34, F35, E60. **KW** International Development. Cold

War. International Lending. Foreign Aid. Public Finance.

AB U.S. development assistance policy has been guided by a series of strategic visions. But there has been a continuing gap between articulated objectives and the resources that have been made available to realize the objectives. U.S. assistance policy has largely been a derivative of cold war containment policy. The search for a new focus will not be reached until a new post war vision of the kind of world that we want to live in during the first half of the 21st century captures political and popular imagination.

Sadka, Efraim

TI International Tax Competition and Gains from Tax Harmonization. **AU** Razin, Assaf; Sadka, Efraim.

Salkever, David S.

TI Updated Estimates of the Impact of Prenatal Care on Birthweight Outcomes by Race. **AU** Frank, Richard G.; Strobino, Donna M.; Salkever, David S.; Jackson, Catherine A.

TI Updated Estimates of the Impact of Prenatal Care on Birthweight Outcomes by Race. **AU** Frank, Richard G.; Strobino, Donna M.; Salkever, David S.; Jackson, Catherine A.

Salvas-Bronsard, L.

TI From a Hicks-Grandmont Temporary Equilibrium to a Rational Expectations Equilibrium and Conversely. **AU** Bronsard, Camille; Salvas-Bronsard, L.; Trognon, A.

TI The Producer and the Real Balance Effect. **AU** Bronsard, Camille; Ouellette, P.; Salvas-Bronsard, L.

Sapir, Andre

PD January 1991. **TI** The Structure of Services in Europe: A Conceptual Framework. **AA** Universite Libre de Bruxelles. **SR** Centre for Economic Policy Research Discussion Paper: 498; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F15, L80, L10, O52. **KW** Service Sector. Economic Integration. European Community. Europe.

AB Thirty years ago, when the Treaty of Rome came into effect, agriculture and manufacturing dominated activity in the European Community. Today, in every member state, services account for more production and employment than agriculture and manufacturing combined. The growing role of services in domestic economies is the result of both demand and supply factors. On the demand side, the major impetus has come from firms that have shifted from providing services they require "in-house" to purchasing these services outside the firm. On the supply side, the main factors have been technological change and deregulation. This paper is part of a study of the impact of 1992 on European service industries. Its purpose is to provide a methodological framework for analyzing the structure of the market for services in Europe on the eve of 1992.

Sassenou, Mohamed

TI R&D and Productivity: A Survey of Econometric Studies at the Firm Level. **AU** Mairesse, Jacques; Sassenou, Mohamed.

Savouri, Savvas

TI Labor Market Policies and Unemployment in the OECD.

AU Jackman, Richard; Pissarides, Christopher; Savouri, Savvas.

Schaffers, Michel

PD October 1990. **TI** A Polynomial Algorithm for the Single Source Network Flow Design Problem on Series-Parallel Graphs. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9062; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve, BELGIUM. **PG** 24. **PR** not available. **JE** C61, C62, C63. **KW** Network Flow. Polynomial Algorithm. Steiner Tree Problem.

AB We describe a polynomial algorithm that solves the Single Source Network Flow Design problem with fixed and variable costs in a polynomial time when the graph is Series-Parallel. This problem is actually the Steiner Tree Problem, to which variable costs on the arcs, proportional to the flow going through them, have been added.

PD October 1990. **TI** The Complexity of the Multicommodity Uncapacitated Network Flow Design Problem with Bounded Decomposability. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9057; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 19. **PR** not available. **JE** C61, C62. **KW** Commodities. Networks.

AB We study the multicommodity network flow problem with variable and fixed costs on the arcs. We show that if the graph has a bounded tree-width, this problem is polynomial when the number of commodities is bounded while it is NP-hard otherwise.

Schmitt, Nicolas

PD May 1990. **TI** Equilibria and Entry in Two Interdependent Spatial Markets. **AA** University of Western Ontario and Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9036; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 29. **PR** not available. **JE** F12, F15, F14, R11. **KW** International Trade. Free Entry. Market Equilibrium. Spatial Markets.

AB This paper investigates the market equilibrium and entry location in interdependent spatial markets. It is first shown that for some international trade problems, an explicit two-market spatial model with a representative firm brings more general results than those obtained with existing approaches. Then, modifying the game, entry location is analyzed and import replacement strategy is shown to be a strong feature of the model. This possible strategy of entry provides an incentive to incumbent firms to establish multi-market production.

Schwartz, Jean-Jacques

PD March 1990. **TI** Mehrwertsteuer - Bundesfinanzen Taxe a la Valeur Ajoutee - Finances Federales Harmonisation au Sein de la Communaute Europeenne. **AA** Universite de Lausanne. **SR** Universite de Lausanne Cahiers de Recherches Economiques: 9003; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne BFSH - Dorigny. CH-1015 Lausanne/SWITZERLAND. **PG** 27. **PR** no charge. **JE** E62, H21, F36. **KW** Taxes. Taxation. European Community.

AB No abstract.

Scotchmer, Suzanne

TI Coordinating Research through Research Joint Ventures. **AU** Gandal, Neil; Scotchmer, Suzanne.

Scott, David W.

TI Smoothing by Weighted Averaging of Rounded Points. **AU** Hardle, Wolfgang K.; Scott, David W.

Seabright, Paul

PD December 1990. **TI** Quality of Livestock Assets under Selective Credit Schemes: Evidence from South Indian Data. **AA** Churchill College, Cambridge. **SR** University of Cambridge DAE Working Paper: 9104; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 22. **PR** \$4.00 (2.00 pounds); checks payable to University of Cambridge. **JE** Q12, R58, O57. **KW** Credit. Livestock. Subsidies. Rural Development. Rural Economics.

AB This paper examines the quality of livestock investments made by participants in India's Integrated Rural Development program in two villages in Southern India. Comparing the returns to livestock investment for IRDP participants against those for a control group of livestock purchasers who were not participants, it finds evidence of substantial price discrimination in the market for livestock. Participants in the scheme receive subsidized loans but purchase milch animals at inflated prices that are not compensated by higher livestock quality. Such imperfections in the markets for livestock assets may have serious adverse consequences for the efficacy of intervention to alleviate the credit market imperfections that are rightly believed to hamper the accumulation of capital by the poor.

Shavell, Steven

PD December 1990. **TI** Individual Precautions to Prevent Theft: Private versus Socially Optimal Behavior. **AA** Harvard University. **SR** National Bureau of Economic Research Working Paper: 3560; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 14. **PR** \$2.00. **JE** K42. **KW** Burglary. Criminal Law. Households.

AB A model is examined in which individuals take precautions that reduce the amount stolen if thieves enter their homes; and the amount of theft is influenced by the level of individuals' precautions. It is emphasized that the motive of individuals acting alone to take precautions may include the diversion of theft to others but does not take into account general deterrence. For this and other reasons, the level of precautions exercised by individuals acting alone may differ from their collectively optimal level and also from the socially optimal level (which reflects effort devoted to theft).

TI Information and the Scope of Liability for Breach of Contract: The Rule of Hadley v. Baxendale. **AU** Bebchuk, Lucian; Shavell, Steven.

Shell, Karl

PD January 1991. **TI** Indivisibilities, Lotteries, and Sunspot Equilibria. **AU** Shell, Karl; Wright, Randall. **AA** Shell: Cornell University. Wright: University of Pennsylvania and Federal Reserve Bank of Minneapolis.

SR Federal Reserve Bank of Minneapolis Staff Report: 133; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 29. **PR** no charge. **JE** D51, D58, J41, E24. **KW** Sunspots. Unemployment. Competitive Equilibrium. Contract Theory.

AB We analyze economies with indivisible commodities. There are two reasons for doing so. First, we extend and provide new insights into sunspot equilibrium theory. Finite competitive economies with perfect markets and convex consumption sets do not allow sunspot equilibria; these same economies with nonconvex consumption sets do, and they have several properties that can never arise in convex environments. Second, we provide a reinterpretation of the employment lotteries used in contract theory and in macroeconomic models with indivisible labor. We show how socially optimal employment lotteries can be decentralized as competitive equilibria once sunspots are introduced.

Shiller, Robert J.

PD February 1991. **TI** Speculative Behavior on the Stock Markets: Evidence from the United States and Japan. **AU** Shiller, Robert J.; Kon-Ya, Fumiko; Tsutsui, Yoshiro. **AA** Shiller: Yale University. Kon-Ya: Japan Securities Research Institute. Tsutsui: Nagoya City University. **SR** National Bureau of Economic Research Working Paper: 3613; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** \$2.00. **JE** G15, G11, D84. **KW** Stock Market. Portfolio Choice. Speculation.

AB There have been enormous differences of opinion between U.S. and Japanese institutional investors about the outlook for stock prices, differences across the two countries in average one-year-ahead forecasts for the Japanese stock market as great as twenty percentage points. In the past two years most Japanese and U.S. institutional investors have had expectations for a reversal of trends in the stock market, and advised an investing strategy that depended on getting out of (or into) the market before an anticipated market turnaround. These results, obtained from a number of questionnaire surveys in 1989 and 1990, help explain the relative lack of portfolio diversification across countries and show the short-term nature of speculative behavior.

TI Actual and Warranted Relations Between Asset Prices. **AU** Beltratti, Andrea E.; Shiller, Robert J.

Shleifer, Andrei

TI Quality and Trade. **AU** Murphy, Kevin M.; Shleifer, Andrei.

TI Window Dressing by Pension Fund Managers. **AU** Lakonishok, Josef; Shleifer, Andrei; Thaler, Richard; Vishny, Robert W.

PD February 1991. **TI** Asset Sales and Debt Capacity. **AU** Shleifer, Andrei; Vishny, Robert W. **AA** Shleifer: Harvard University. Vishny: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 3618; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 38. **PR** \$2.00. **JE** G33, G32, M21. **KW** Debt. Bankruptcy. Liquidation. Corporations. Business Finance.

AB In this paper, we explore the link between asset sales and debt capacity. Asset sales are a common way for firms to raise cash, and so present an alternative to security issues for firms

near financial distress. We argue that liquid assets -- those that can be resold at attractive terms -- are good candidates for debt finance because financial distress for firms with such assets is relatively inexpensive. We apply this logic to explain variation in debt capacity across industries and over the business cycle, as well as to the rise in U.S. corporate leverage in the 1980s.

Shy, Oz

TI Technology Revolutions and the Gestation of New Technologies. **AU** Chou, Chien-Fu; Shy, Oz.

Sickles, Robin C.

TI Product Diversification, Economies of Scope and Risk Avoidance: An Application to Indian Agriculture. **AU** Ballivian, Maria Amparo; Sickles, Robin C.

TI The CET-CES-Generalized Leontief Variable Profit Function: An Application to Indian Agriculture. **AU** Behrman, Jere R.; Lovell, C. A. Knox; Pollack, Robert A.; Sickles, Robin C.

TI Finite Sample Evidence on the Performance of Stochastic Frontiers and Data Envelopment Analysis Using Panel Data. **AU** Gong, Byeong-Ho; Sickles, Robin C.

Siconolfi, Paolo

TI Government Debt and Equity Capital in an Economy with Credit Rationing. **AU** Reichlin, Pietro; Siconolfi, Paolo.

Siegel, Donald

PD April 1991. **TI** Purchased Services, Outsourcing, Computers, and Productivity in Manufacturing. **AU** Siegel, Donald; Griliches, Zvi. **AA** Siegel: State University of New York, Stony Brook. Griliches: Harvard University. **SR** National Bureau of Economic Research Working Paper: 3678; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 38. **PR** \$2.00. **JE** L21, L23, O47, L33. **KW** Manufacturing. Productivity Growth.

AB Increases in purchased services, foreign outsourcing and investments in computers are alleged to have resulted in an understatement of input growth in manufacturing, and thus, overstatement of growth in productivity, GNP, and value-added in industries heavily engaged in these activities. Based on Census Bureau data, we examine whether the recent (post-1979) improvement in measured manufacturing productivity growth can be attributed to an increase in the rate of foreign and domestic outsourcing. Our preliminary evidence, based on data that are not comprehensive, suggests that an industry's propensity to outsource is unrelated to its acceleration in productivity.

Silvestre, Joaquim

PD February 1991. **TI** The Market-Power Foundations of Macroeconomic Policy. **AA** University of California at Davis. **SR** University of California at Davis Economics Department Working Paper: 374; Department of Economics, University of California at Davis, Davis, California 95616-8578. **PG** 89. **PR** no charge. **JE** E13, E12, E63, D43. **KW** Market Power. Imperfect Competition. Monetary Policy. Macroeconomic Policy.

AB This survey covers recent research that aims at justifying macroeconomic policy by simple, general equilibrium models where firms or trade unions have market power. The first theme

is the efficacy of government spending, based on the inefficiency of equilibrium when agents are price setters. The second theme is the role of monetary policy from two approaches: the new Keynesian approach, where price-setters do not immediately raise prices after an increase in the money supply, and the "coordination problem" approach, where monetary expansion provides a coordination signal for economic agents to move towards a Pareto superior equilibrium. The third theme is the appropriateness of the Walrasian model as an approximation to economies with low degrees of monopoly. It turns out that models with well-defined inverse demand functions may display coordination problems only at significant degrees of market power.

Sinn, Hans-Werner

PD January 1991. **TI** Macroeconomic Aspects of German Unification. **AA** CES, National Bureau of Economic Research, University of Vienna, and University of Munich. **SR** National Bureau of Economic Research Working Paper: 3596; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 59. **PR** \$2.00. **JE** L33, P52, O52. **KW** Unification. Germany. Privatization.

AB The paper comments on the economic effects of the German unification. Apart from discussing the unification in an international perspective, analyzing the distributional consequences, and pointing to structural adjustment problems, it emphasizes the distinction between the frequently cited money overhang and the real asset overhang which characterizes communist countries. The paper argues that the unification paid too little attention to the latter, endowing East Germans with insufficient claims on state owned enterprises. The centralized privatization of state owned enterprises, which bypasses the east German population, is seen as a major obstacle to quick recovery, and an alternative privatization procedure is discussed.

Skeels, Christopher L.

PD March 1990. **TI** A Conditional Canonical Approach to Simulation Studies of IV Estimators in Simultaneous Equations Models. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 198; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 29. **PR** no charge. **JE** C13, C15, C13, C51. **KW** Instrumental Variables. Estimation. Simulation. Simultaneous Equation.

AB Researchers have long been concerned with improving the performance of simulation methods. Frequently this could be achieved by fully exploiting the usual normality assumption. This paper seeks to illustrate, with particular reference to IV estimators in simultaneous equations models, one technique that does exploit the available information more fully than standard simulation techniques. The results obtained have implications for both experimental design and computational efficiency. A simple application of the techniques advocated highlights these benefits. Suggestions are also made for extending the approach to non-normal situations.

Smith, Eric

PD April 1991. **TI** Why is Automobile Insurance in Philadelphia so Damn Expensive? **AU** Smith, Eric; Wright, Randall. **AA** Smith: University of Essex. Wright: Federal

Reserve Bank of Minneapolis and University of Pennsylvania. **SR** Federal Reserve Bank of Minneapolis Staff Report: 139; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 36. **PR** no charge. **JE** G22, K13, D81. **KW** Insurance. Automobile. Coordination Failure. Premiums. Liability.

AB We document and attempt to explain the observation that automobile insurance premiums vary dramatically across local markets. We argue high premiums can be attributed to the large numbers of uninsured motorists in some cities, while at the same time, the uninsured motorists can be attributed to high premiums. We construct a simple noncooperative equilibrium model, where limited liability can generate inefficient equilibria with uninsured drivers and high, yet actuarially fair, premiums. For certain parameterizations, an optimal full insurance equilibrium and inefficient high price equilibria with uninsured drivers exist simultaneously, consistent with the observed price variability across seemingly similar cities.

Smith, Jeremy

PD December 1990. **TI** Alternative Procedures for Converting Qualitative Response Data to Quantitative Expectations: An Application to Australian Manufacturing. **AU** Smith, Jeremy; McAleer, Michael. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 219; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 56. **PR** no charge. **JE** C25, D84. **KW** Qualitative Variables. Probability Method. Survey. Regression Method. Expectations. **AB** This paper analyzes and extends alternative procedures for converting qualitative response data to quantitative expectations. The critical review has two purposes, namely to examine which method provides the best forecasts and to establish whether the results are robust to the conversion procedures used. A number of conversion procedures is investigated, including the probability model of Carlson and Parkin (1985), the time varying parameter probability model, the regression approach of Pesaran (1987), and extensions of Pesaran's regression model. The informational content of the expectations series is compared with simple time series model.

PD April 1991. **TI** Multivariate Cointegration and Error Correction Models: An Application to Manufacturing Activity in Australia. **AU** Smith, Jeremy; Hagan, Jim. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 223; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 56. **PR** no charge. **JE** L60, E23, E24. **KW** Australia. Manufacturing. Employment. Prices. Output.

AB This paper analyzes the behavior of the Australian manufacturing sector using quarterly data on employment, output, output prices, input prices and wages from 1975 until 1988. Quantitative expectations of output, employment and output prices formed from qualitative expectations in Smith and McAleer (1990) are added to the system of variables. The existence of long-run (co-integrating) relationships between these variables are tested and the data suggests the existence of two long-run relationships: the first resembles an output equation, the second an employment equation. Using these long-run relationships, short-run models for the five separate variables are built. The results from these short-run models

suggest that the price variables have been mostly responsible for the movements in the output, employment and prices that have been observed in the Australian manufacturing sector over this period, with a much smaller contribution due to output and employment changes.

Smith, Peter N.

PD December 1990. **TI** Modelling Risk Premia in International Asset Markets. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 221; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** not available. **PR** no charge. **JE** G15, F21. **KW** Risk Premium. Asset Markets. Asset Pricing. Currency.

AB It is, by now, a well-documented result that there exists a predictability in the returns on a number of assets traded on world financial markets. This finding draws the joint hypothesis of rational expectations and risk neutrality into question. In this paper we investigate the claims of a number of versions of the intertemporal capital asset pricing model (ICAPM) to explain this predictability in a set of asset returns. Many previous studies have concentrated on modeling the forward premium on sets of currencies. This approach ignores the heterogeneity in the assets actually traded in international asset markets. In particular the issue of the relationships between returns on equity in various currencies and returns on bonds has been given little attention. In this paper we show that the latent variable risk premium model is not rejected by the data when tested on a portfolio including equity and bonds in four currencies. It also appears that we cannot reject that relative covariances and therefore relative beta's are constant.

Smith, Richard J.

PD July 1989. **TI** Non-Nested Tests for Instrumental Variable Regression Models with Differing Conditioning Sets. **AA** University of Cambridge. **SR** University of Cambridge DAE Working Paper: 9103; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 24. **PR** \$4.00 (2.00 pounds); checks payable to University of Cambridge. **JE** C12, C22, C52. **KW** Encompassing Test. Instrumental Variables. Non-Nested Hypotheses. Hypothesis Testing. Heteroskedasticity. Autocorrelation.

AB This paper generalizes Godfrey's (1983) results on non-nested instrumental variable regression models to include possible heteroskedasticity and autocorrelation of unknown form in the process generating the disturbances and to models in which the instrument sets may not be valid in the competing model. Cox-type and encompassing tests are developed along with regression versions of the tests which are relatively easy to compute.

PD October 1990. **TI** Asymptotically Optimal Tests using Limited Information and Testing for Exogeneity. **AA** University of Cambridge and Gonville and Caius College. **SR** University of Cambridge DAE Working Paper: 9102; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 30. **PR** \$4.00 (2.00 pounds); checks payable to University of Cambridge. **JE** C12, C32, C52. **KW** Simultaneous Equations Model. Exogeneity. Hypothesis Testing. Asymptotic Theory.

AB By appropriately partitioning a weak exogeneity

hypothesis and showing that the component sub-hypotheses are separable, asymptotically optimal tests for the weak exogeneity hypothesis may be constructed using limited information statistics for the component sub-hypotheses. A condition for the separability of parametric hypotheses of the mixed implicit function and constraint equation type is derived which generalizes conditions previously obtained in the literature. Consequently, limited and full information procedures for testing the weak exogeneity hypothesis are asymptotically equivalent. The impact of these results for testing weak and strong exogeneity in the linear dynamic simultaneous equations model is explored.

Smith, Ron

TI Measuring the Peace Dividend in the United Kingdom. **AU** Barker, Terry; Dunne, Paul; Smith, Ron.

Smith, S.

TI Labor Managed vs. Private Firms: An Empirical Comparison of Cooperatives and Private Firms in Central Italy. **AU** Bartlett, W.; Cable, J.; Estrin, S.; Jones, D.; Smith, S.

Snower, Dennis J.

TI Unemployment through "Learning from Experience." **AU** Alpern, Steve; Snower, Dennis J.

TI Segmented Labor Markets and Unemployment. **AU** Lindbeck, Assar; Snower, Dennis J.

TI Price-Quantity Decisions as Learning Instruments. **AU** Alpern, Steve; Snower, Dennis J.

TI "Inter-Industry Wage Structure and the Power of Incumbent Workers" and "Interactions between the Efficiency Wage and Insider-Outsider Theory." **AU** Lindbeck, Assar; Snower, Dennis J.

TI The Maximal Value of Demand Information: The High-Low Search Approach. **AU** Alpern, Steve; Snower, Dennis J.

TI Unemployment through "Learning from Experience." **AU** Alpern, Steve; Snower, Dennis J.

Solomou, Solomos

TI Bilateralism in the Interwar World Economy. **AU** Kitson, Michael; Solomou, Solomos.

Spaventa, Luigi

TI Fiscal Rules in the European Monetary Union: A Non-Entry Clause. **AU** Giovannini, Alberto; Spaventa, Luigi.

Spiegel, Mark M.

TI Are Buy-Backs Back? Menu-Driven Debt-Reduction Schemes with Heterogeneous Creditors. **AU** Diwan, Ishac; Spiegel, Mark M.

Spitzer, Matthew L.

PD January 1990. **TI** Justifying Minority Preferences in Broadcasting. **AA** California Institute of Technology and University of Southern California. **SR** Caltech Social Science Working Paper: 718; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 67. **PR** no charge. **JE** L82, L21, L51. **KW** Broadcasting. Minorities. Affirmative Action. Government Policy. Radio.

AB For the past 16 years racial and ethnic minorities, and, to a lesser extent, women, have been targeted by several Federal Communications Commission policies designed to increase the number of broadcasting stations owned by members of those groups. The FCC, prodded by judicial decisions, claims that by increasing the diversity of ownership of the airwaves it will increase the diversity of programming content. Hence, these policies -- termed "minority preference policies" -- are justified as a method of controlling broadcasting content. Congress is intensely interested in protecting these policies, while litigants are attacking the policies' constitutionality in the courts. This article appraises the justification for the minority preference policies -- the purported connection between a broadcast station owner's race or sex and the owner's programming decisions. Do white males really program differently than black, Hispanic, Asian/Pacific Islander, Alaskan/American Indian, or female owners? If so, when, and in what ways is this likely to be true?

Staiger, Robert

PD March 1991. **TI** Does Commitment Matter in Trade Policy? **AU** Staiger, Robert; Tabellini, Guido. **AA** Staiger: University of California, Los Angeles. Tabellini: Università di Cagliari and Institute for Economic Research, Italy. **SR** Centre for Economic Policy Research Discussion Paper: 514; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 43. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F13, F14. **KW** Credibility. Tariffs. Commitment. Trade Policy. Trade Negotiations.

AB We test for evidence that U.S. trade policy depends on the degree of government discretion. We do this by studying U.S. tariff choices under two distinct environments. One is that of tariffs set under the Escape Clause (section 201 of the U.S. Trade Act of 1974). The other is the Tokyo Round of GATT negotiations and the determination of the set of exclusions from the general formula cuts. We argue that the second environment provides much more capacity to commit than the first one. Comparing decisions made in these two environments allows us to ask whether the degree of policy commitment has a measurable impact on trade policy. Our findings suggest that it does.

Stambaugh, Robert F.

TI Asset Returns and Intertemporal Preferences. **AU** Kandel, Shmuel; Stambaugh, Robert F.

Steiger, W.

TI Optimal Median Smoothing. **AU** Hardle, Wolfgang K.; Steiger, W.

Steigerwald, Douglas G.

PD October 1990. **TI** Generalized Adaptive Estimation for Econometric and Financial Models. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 13-90; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. **PG** 40. **PR** no charge. **JE** C14, C22, C51. **KW** Estimation. Semiparametric Methods. Linear Regression Model. Serial Correlation. Heteroskedasticity.

AB Earlier work on adaptive estimation in linear and nonlinear regression models has relied upon several key

restrictions on the class of distributions generating the unknown disturbances. Perhaps the most widely criticized is the assumption of symmetry; for many applications significant departures from normality are characterized by asymmetries. In this work we show that adaptive estimators can be derived under distributional conditions that do not require symmetry. We demonstrate the existence of these estimators in a linear regression model with serially correlated disturbances. Further, we show that for many problems the parameters of interest can be efficiently estimated asymptotically under restrictions that require only the first two moments of the error distribution to be bounded and allow for heteroskedasticity.

Stein, Jeremy C.

TI Monetary Policy and Credit Conditions: Evidence from the Composition of External Finance. **AU** Kashyap, Anil K.; Stein, Jeremy C.; Wilcox, David W.

TI The Evolution of Buyout Pricing and Financial Structure. **AU** Kaplan, Steven; Stein, Jeremy C.

Stein, Jerome L.

PD September 1989. **TI** The Real Exchange Rate. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 89-24; Department of Economics, Brown University, Providence, RI 02912. **PG** 31. **PR** no charge. **JE** F31, G15, H62. **KW** Exchange Rate. Deficits. Productivity. Capital Markets.

AB This essay concerns the real value of the U.S. relative to the G-10. (i) What are the dynamics of the fundamental determinants of the real exchange rate and its steady state value? (ii) To what extent are the observed movements in the exchange rate from 1973 to 1988 due to the fundamentals? (iii) How integrated are international capital markets? (iv) How does the real exchange rate respond to (a) changes in the cyclically adjusted government budget deficit, and to (b) changes in the marginal efficiency of investment?.

Steinmeier, Thomas L.

TI The Effects of Pensions and Retirement Policies on Retirement in Higher Education. **AU** Gustman, Alan L.; Steinmeier, Thomas L.

Stemp, Peter J.

PD June 1988. **TI** Optimal Money Supply Responses in an Open Economy under Alternative Expectations Scenarios. **AA** Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 163; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 34. **PR** no charge. **JE** F41, E42, E51, E52. **KW** Money Supply. Open Economy. Expectations. Stochastic Models. Monetary Policy.

AB In this paper, optimal money supply rules are examined in a small stochastic open economy characterized by a flexible exchange rate regime. The monetary authority is assumed to minimize fluctuations in the economy, making full use of all information available when the monetary policy rule is being formulated. Different expectations scenarios are considered, allowing for the proposition that market participants have differential access to market information for the formation of expectations. When private agents employ the same information in forming expectations as the monetary authority

employs in determining the money supply rule and, when the monetary authority has as its sole objective to stabilize a real variable, such as output, then any money supply rule is as good as any other. In all other cases there is an optimal money supply response which varies systematically according to the size of shocks to the economy, the monetary authority's objective criterion and the nature of expectations formation.

Stiglitz, Joseph E.

TI Equilibrium in Competitive Insurance Markets with Moral Hazard. **AU** Arnott, Richard; Stiglitz, Joseph E.

PD January 1991. **TI** Alternative Approaches to Macroeconomics: Methodological Issues and the New Keynesian Economics. **AA** Stanford University. **SR** National Bureau of Economic Research Working Paper: 3580; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 72. **PR** \$2.00. **JE** E12, B22, B41. **KW** Macroeconomics. Keynesian Theory. Economic Methodological. Labor Market.

AB While recent alternative approaches to macroeconomics have all begun with the presumption that macroeconomic behavior ought to be derived from microeconomic foundations, they have differed in their views concerning the appropriate microfoundations. This paper explores some of the key methodological issues, including those concerning the use of representative agent models, choices in parameterization, problems in aggregation and modeling adjustment processes and speeds, the imposition of ad hoc assumptions, such as that of instantaneous market clearing, and alternative approaches to validation of proposed theories. The paper summarizes the basic questions with which macroeconomic theory should be concerned.

TI Information, Finance, and Markets: The Architecture of Allocative Mechanisms. **AU** Greenwald, Bruce C.; Stiglitz, Joseph E.

PD March 1991. **TI** The Invisible Hand and Modern Welfare Economics. **AA** Stanford University. **SR** National Bureau of Economic Research Working Paper: 3641; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 48. **PR** \$2.00. **JE** D61, D51, D52. **KW** Welfare Economics. Market Economies. Imperfect Information.

AB This paper reviews and puts into perspective recent work reassessing the first and second Fundamental Theorems of Welfare Economics. It assesses the implication of the Greenwald-Stiglitz Theorem establishing the (constrained) Pareto inefficiency of market economies with imperfect information and incomplete markets as well as recent work on endogenous technological change. The information theoretic limitations to the Second Fundamental Theorem are also discussed, including the inability to separate out issues of equity and efficiency. The final sections of the paper consider the consequences of these problems for economic organization, economic policy, and the role of ideology in the belief in the Invisible hand.

PD April 1991. **TI** Government, Financial Markets, and Economic Development. **AA** Stanford University. **SR** National Bureau of Economic Research Working Paper: 3669; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** \$2.00. **JE** O16, O11. **KW** Economic Development.

Capitalism. Financial Markets. Capital Markets. Government Policy.

AB Ideological debates on the role of government in development have focused on two contrasting prescriptions: one calling for large scale government interventions to solve problems of massive market failures, the other for the unfettering of markets, with the dynamic forces of capitalism naturally leading to growth and prosperity. This paper is part of an exploration of a middle road, focusing in particular on the role of government in financial markets. After explaining the importance of, and the limitations on, capital markets, particularly in allocating scarce investment resources, the results are used as a basis of a critique of the two "extreme" approaches. Recognizing the limitations of government intervention as well as of free markets, the "new view" of capital markets provides new insights into a variety of policy issues, which are addressed in the final section of the paper.

Stockman, Alan C.

PD November 1990. **TI** Tastes and Technology in a Two-Country Model of the Business Cycle: Explaining International Comovements. **AU** Stockman, Alan C.; Tesar, Linda L. **AA** Stockman: University of Rochester and National Bureau of Economic Research. Tesar: University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 16-90; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. **PG** 29. **PR** no charge. **JE** F41, F43, F14. **KW** Business Cycle. Economic Growth. Open Economy.

AB This paper develops a two-sector, two-country model of the real business cycle and examines the implications of the model for the behavior of domestic and international variables in the largest OECD countries. We find that by disaggregating the standard real business cycle model to include nontraded goods, the model can explain several features of international data. However, when the model is driven by technology shocks, the model produces several implications which are clearly at odds with empirical observations. In particular, the model fails to explain the low cross-country correlations between consumption and the co-movements of prices and quantities. We conclude that a model which includes random disturbances to preferences as well as to technology is required to account for these observations.

Stotsky, Janet G.

TI The Effect of Rent Control on Housing Quality Change: A Longitudinal Analysis. **AU** Moon, Choon-Geol; Stotsky, Janet G.

Strobino, Donna M.

TI Updated Estimates of the Impact of Prenatal Care on Birthweight Outcomes by Race. **AU** Frank, Richard G.; Strobino, Donna M.; Salkever, David S.; Jackson, Catherine A.

Stutzer, Michael J.

PD November 1989. **TI** Duality and Arbitrage with Transactions Costs: Theory and Applications. **AA** Federal Reserve Bank of Minneapolis and University of Minnesota. **SR** Federal Reserve Bank of Minneapolis Staff Report: 128; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 37. **PR** no charge. **JE** G31, G11, G12, D23.

KW Transactions Costs. Portfolio Choice. Asset Prices. Securities Markets.

AB Recent advances in duality theory have made it easier to discover relationships between asset prices and the portfolio choices based on them. But this approach to arbitrage-free securities markets has yet to be extended and applied to economies with transactions costs. This paper does so, within the context of a general state-preference model of securities markets. Several applications are developed to illustrate the nature of the theory and its potential to resolve a host of issues surrounding the effects of transactions costs on securities markets.

Summers, Lawrence

TI Japan's High Saving Rate Reaffirmed. **AU** Dekle, Robert; Summers, Lawrence.

Sundaram, Rangarajan K.

TI Bayesian Economists ... Bayesian Agents I: An Alternative Approach to Optimal Learning. **AU** El-Gamal, Mahmoud A.; Sundaram, Rangarajan K.

Svensson, Lars E. O.

TI Stochastic Devaluation Risk and the Empirical Fit of Target Zone Models. **AU** Bertola, Giuseppe; Svensson, Lars E. O.

PD January 1991. **TI** The Term Structure of Interest Rate Differentials in a Target Zone: Theory and Swedish Data. **AA** University of Stockholm. **SR** Centre for Economic Policy Research Discussion Paper: 495; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 41. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, E42, E43, F36, G15. **KW** Exchange Rate. Interest Rates. Economic Integration. International Markets.

AB The term structure of interest rate differentials is derived in a model of a small open economy with a target zone exchange rate regime. The target zone is modeled as a regulated Brownian motion. The interest rate differentials are computed as the solution to a parabolic differential equation with derivative boundary conditions, both via a Fourier-series analytical solution and via a direct numerical solution. Several specific properties of the term structure of interest rate differentials are derived. For instance, for given time to maturity the interest rate differential is decreasing in the exchange rate, and for given exchange rate the interest rate differential's absolute value and its instantaneous variability are both decreasing in the time to maturity. Devaluation/realignment risks are incorporated and imply upward shifts of the interest rate differentials.

PD January 1991. **TI** The Foreign Exchange Risk Premium in a Target Zone with Devaluation Risk. **AA** University of Stockholm. **SR** Centre for Economic Policy Research Discussion Paper: 494; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 25. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, E42, E52. **KW** Foreign Exchange. Exchange Rate. Target Zones. Devaluation. Monetary Policy.

AB The foreign exchange risk premium in an exchange rate target zone regime with devaluation/realignment risks is derived. In contrast to previous literature, the exchange rate's

heteroskedasticity within the band, as well as a separate devaluation/realignment risk, is taken into account. The risk premium is then the sum of two separate risk premia, arising from stochastic exchange rate movements within the band and from stochastic devaluations/realignments when the band is shifted. Both real and nominal exchange rate premia are considered. The real and nominal risk premia from movements within the band are very small for narrow target zones and can therefore be disregarded. The real and nominal risk premia from devaluations/realignments are larger but still relatively small proportions of the expected rate of devaluation/realignment.

PD January 1991. **TI** The Simplest Test of Target Zone Credibility. **AA** University of Stockholm. **SR** Centre for Economic Policy Research Discussion Paper: 493; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 19. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F31, E42, E52. **KW** Exchange Rate. Devaluation. Target Zone. Interest Rates. Monetary Policy.

AB Under the assumption of no arbitrage, exchange rate target zone credibility is tested by whether domestic interest rates fall within "rate-of-return bands" between the maximum and minimum home-currency rate of return on a foreign investment in the absence of devaluation. Under the assumption of uncovered interest rate parity, credibility is tested by whether expected future exchange rates fall within the exchange rate band. Under the assumption that devaluations are a Poisson process, the expected exchange rate, the probability intensity and the expected size of a devaluation can be related. These tests are illustrated using data on the Swedish target zone between January 1987 and August 1990.

TI Stochastic Devaluation Risk and the Empirical Fit of Target Zone Models. **AU** Bertola, Giuseppe; Svensson, Lars E. O.

TI Expected and Predicted Realignments: The FF/DM Exchange Rate during the EMS. **AU** Rose, Andrew K.; Svensson, Lars E. O.

Swanson, Timothy M.

PD August 1990. **TI** From Patents to Elephants: The Predictable Failures of International Resource Law. **AA** University College London. **SR** University College London Discussion Paper: 90-13; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. **PG** 46. **PR** 2.00 pounds. **JE** E42, K33. **KW** Environment. Global Resources. International Regulation. Policy Coordination. International Law.

AB Many international resources are of the nature of classic "open access" resources; these resources include information, the atmosphere and even, in effect, the African elephant. The economic paradigm of the open access resource states that overexploitation and waste will occur in the absence of the coordination of all users. In the realm of the international resources, such coordination is attempted through the process of "international lawmaking"; this is a process which is distinguished by three primary characteristics: contractual lawmaking, sequential acceptance and uniform standards. This paper investigates the predictable outcomes of such a process in regard to the establishment of "shares" in the use of an "open access" resource.

Symansky, Steven

TI International VAT Harmonization: Economic Effects.
AU Frenkel, Jacob A.; Razin, Assaf; Symansky, Steven.

Szekely, Istvan

PD April 1991. **TI** Industrial Restructuring and the Reorientation of Trade in Czechoslovakia, Hungary, and Poland. **AU** Szekely, Istvan; Landesmann, Michael. **AA** Cambridge University. **SR** Centre for Economic Policy Research Discussion Paper: 546; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 50. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** P52, O52, F14. **KW** International Trade. Industrialization. Economic Reform. Europe.

AB The paper discusses the long-run pattern of growth that characterized Czechoslovakia, Hungary and Poland over the 1970s and 1980s and also shows the immediate impact of the dramatic developments of the last year and a half upon industrial production, investment and employment including compositional features. It carries out an analysis of the pattern and degree of structural change that has taken place in these economies since 1966 and compares these with a number of West European economies. Indicators of structural shifts reveal the impacts of external and internal shocks upon structural adjustments in the different economies. The paper also reports research on the details of product composition that characterize the trade links of these economies with the European Community.

Tabellini, Guido

TI Is Inequality Harmful for Growth? Theory and Evidence.
AU Persson, Torsten; Tabellini, Guido.

TI The Politics of 1992: Fiscal Policy and European Integration. **AU** Persson, Torsten; Tabellini, Guido.

TI Does Commitment Matter in Trade Policy?
AU Staiger, Robert; Tabellini, Guido.

Tahar, Gabriel

TI The Diffusion of Interdependent Innovations in the Textile Industry. **AU** Antonelli, Cristiano; Petit, Pascal; Tahar, Gabriel.

Tan, Ling Hui

TI Rent Sharing in the Multi-Fibre Arrangement: Theory and Evidence from U.S. Apparel Imports from Hong Kong.
AU Krishna, Kala; Erzan, Refik; Tan, Ling Hui.

Taylor, Larry Wayne

PD November 1988. **TI** Variable Addition Tests for Regression Models with Qualitative and Continuous Variables. **AA** Lehigh University and Australian National University. **SR** Australian National University Working Paper in Economics and Econometrics: 172; Department of Economics, Australian National University, GPO Box 4, Canberra, ACT 2601, AUSTRALIA. **PG** 18. **PR** no charge. **JE** C35, C52. **KW** Simultaneous Equation Models. Probit Model. Finite Sample Properties. Small Samples. Simulation.

AB The purpose of this paper is to present two convenient variable addition tests to detect endogenous regressors for models with qualitative variables. Finite sample properties are investigated through simulation and an empirical example

illustrates the usefulness of the tests.

Taylor, Lowell J.

TI Work Incentives and the Demand for Primary and Contingent Labor. **AU** Rebitzer, James B.; Taylor, Lowell J.

Tesar, Linda L.

TI Tastes and Technology in a Two-Country Model of the Business Cycle: Explaining International Comovements.
AU Stockman, Alan C.; Tesar, Linda L.

PD November 1990. **TI** International Risk-Sharing and Nontraded Goods. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 15-90; Working Papers Coordinator, Department of Economics, University of California, Santa Barbara, CA 93106. **PG** 37. **PR** no charge. **JE** F31, G15, F14, F21, F43. **KW** Business Cycle. Trade Model. International Investment. Economic Growth.

AB A number of empirical observations have led researchers to believe that international financial markets are insufficient for complete risk sharing. First, savings and investment rates in the industrialized countries are positively correlated. Second, the correlation between consumption growth rates is less than the correlation between growth rates of output. Finally, portfolios of investors in these countries continue to be dominated by domestic assets. This paper demonstrates that these facts are consistent with complete financial markets when nontraded goods are incorporated into the analysis. Depending on the degree of substitutability between traded and nontraded goods and the intertemporal elasticity of substitution, the optimal portfolio of domestic investors may be concentrated in claims on domestic output.

Thaler, Richard

TI Window Dressing by Pension Fund Managers.
AU Lakonishok, Josef; Shleifer, Andrei; Thaler, Richard; Vishny, Robert W.

Thisse, Jacques-Francois

TI Sequential Entry, Experience Goods and Brand Loyalty.
AU Gabszewicz, Jean J.; Pepall, Lynne; Thisse, Jacques-Francois.

TI Price Equilibria in Pure Strategies for Homogeneous Oligopoly. **AU** Allen, Beth; Thisse, Jacques-Francois.

TI Price Equilibria in Pure Strategies for Homogeneous Oligopoly. **AU** Allen, Beth; Thisse, Jacques-Francois.

Thomas, S. H.

PD January 1991. **TI** Currency Substitution and Vehicle Currencies: Tests of Alternative Hypotheses for the Dollar, DM and Yen. **AU** Thomas, S. H.; Wickens, M. R. **AA** Thomas: Southampton University. Wickens: London Business School. **SR** Centre for Economic Policy Research Discussion Paper: 507; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 35. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** E41, F33, F31. **KW** Currency. Capital Controls. Exchange Rate. Money Demand. Foreign Exchange. **AB** Recent concern about the difficulty of obtaining structurally stable models of money demand combined with the removal of capital controls have drawn attention to the theory

of currency substitution (CS). The purpose of this paper is to examine whether CS is a relevant factor in the demand for currency. A number of different theories are considered. The traditional approach to the demand for money focuses on the domestic holding. In contrast CS is concerned with both domestic and foreign holding of domestic currency, and with the substitutability between domestic and foreign currencies.

Timmermann, Alan G.

TI A Simple, Non-Parametric Test of Predictive Performance. **AU** Pesaran, M. Hashem; Timmermann, Alan G.

TI The Statistical and Economic Significance of the Predictability of Excess Returns on Common Stocks. **AU** Pesaran, M. Hashem; Timmermann, Alan G.

Topel, Robert, H.

TI The Assimilation of Immigrants in the U.S. Labor Market. **AU** LaLonde, Robert J.; Topel, Robert, H.

Trela, Irene

PD February 1991. **TI** Internal Quota Allocation Schemes and the Costs of the MFA. **AU** Trela, Irene; Whalley, John. **AA** Trela: University of Western Ontario. Whalley: National Bureau of Economic Research and University of Western Ontario. **SR** National Bureau of Economic Research Working Paper: 3627; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 59. **PR** \$2.00. **JE** F13, O57, F01. **KW** Developing Countries. Exports. Quotas.

AB This paper suggests that schemes used within developing countries to allocate textile export quota among domestic producers typically have more severe negative effects on developing country economic performance than the MFA export quotas themselves. We summarize allocation schemes in 17 countries, highlighting common "lock-in" and "rent dissipation" effects of such schemes. We then use a global general equilibrium model to evaluate the effects of MFA removal with and without these additional effects. Results indicate that estimates of gains to developing countries from an MFA removal are larger and by significant orders of magnitude (we suggest a factor of 8) when internal quota allocation schemes are also included. Removing the negative effects of quota allocation schemes thus seems to clearly dominate traditional access benefits to developing countries from MFA removal.

Trognon, A.

TI From a Hicks-Grandmont Temporary Equilibrium to a Rational Expectations Equilibrium and Conversely. **AU** Bronsard, Camille; Salvas-Bronsard, L.; Trognon, A.

Tse, Y. K.

TI A Sequential Testing Procedure for Outliers and Structural Change. **AU** McAleer, Michael; Tse, Y. K.

Tsutsui, Yoshiro

TI Speculative Behavior on the Stock Markets: Evidence from the United States and Japan. **AU** Shiller, Robert J.; Kon-Ya, Fumiko; Tsutsui, Yoshiro.

Tsybakov A. B.

TI How Many Terms should be Added into an Additive Model? **AU** Hardle, Wolfgang K.; Tsybakov A. B.

Tulkens, Henry

PD July 1990. **TI** Non-Parametric Efficiency Analyses in four Service Activities: Retail Banking, Municipalities, Courts and Urban Transit. **AA** not available. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9050; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Nueve BELGIUM. **PG** 47. **PR** not available. **JE** H11, G21, H40. **KW** Public Sector. Nonparametric Model. Banking.

AB The purpose of this paper is to present, analyze and suggest uses of results obtained from "FDH" nonparametric measures of efficiency in various public sector activities. A methodological section first puts FDH measures on perspective vis-a-vis other nonparametric techniques. Next, in two applications where FDH results are contrasted with those obtained with DEA, important characteristics of the data are revealed by the former that are not by the latter, due to better data fit: this is the case with the ranking of a private vs. a public bank in terms of the relative efficiency of their branches, as well as with the role of political majorities as an explanatory factor of excess spendings of municipalities.

TI Assessing the Performance of Public Sector Activities: Some Recent Evidence from the Productive Efficiency Viewpoint. **AU** Pestieau, Pierre; Tulkens, Henry.

TI Strategic Use of Tax Rates and Credits in a Model of International Corporate Income Tax Competition. **AU** Mintz, Jack M.; Tulkens, Henry.

Tuma, Elias H.

PD March 1991. **TI** Economic Costs of Ethnic and Sex Discrimination in Middle Eastern Society -- Exploration. **AA** University of California at Davis. **SR** University of California at Davis Economics Department Working Paper: 381; Department of Economics, University of California at Davis, Davis, California 95616-8578. **PG** 38. **PR** no charge. **JE** J71, J15, O53. **KW** Discrimination. Ethnicity. Gender. Middle East. Minorities.

AB This comparative history of discrimination focuses on these hypotheses: 1) Discrimination against ethnic minorities and women in the Middle East has been institutionalized thoroughly enough to be taken for granted; 2) Discrimination favors the discriminators economically, at the expense of the economy at large; 3) Discrimination tendencies have prevailed regardless of the period or the economic system in existence. Available evidence shows that discrimination has been common in the post-WWII period, has had negative effects, and has been largely ignored by policy-makers. Attempts to estimate the economic costs, by illustrative examples drawn from the Israeli and Egyptian societies, indicate that total output would have been higher by over 25% had discrimination against minorities and women by underendowment and underutilization been absent. Preliminary estimates for other countries in the region suggest similar magnitudes of costs.

Tuomala, Matti

TI Optimal Non-Linear Income Taxation for the Alleviation of Income Poverty. **AU** Kanbur, Ravi; Keen, Michael; Tuomala, Matti.

Turnovsky, Stephen J.

TI Stochastic Equilibrium and Exchange Rate Determination in a Small Open Economy with Risk Averse Optimizing Agents. **AU** Grinols, Earl L.; Turnovsky, Stephen J.

Uhlich, Gerald

TI The Negotiation Agreement Area: Data Supplement. **AU** Rockenbach, Bettina; Uhlich, Gerald.

Ulph, Alistair M.

PD September 1990. **TI** Labor Markets and Innovation: Ex-Post Bargaining. **AU** Ulph, Alistair M.; Ulph, D. T. **AA** A. M. Ulph: University of Southampton. D. T. Ulph: University of Bristol. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9010; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 24. **PR** no charge. **JE** O31, J51. **KW** Innovation. Unions. Labor Markets.

AB There is considerable interest in how labor market conditions affect innovation. Economists interested in inter-country comparisons of innovative performance have pointed to the different conditions in capital and labor markets as possible explanatory factors, while labor economists are now investigating the impact of unions on features like investment and R&D. Empirical studies of the impact of unionization on innovation have shown conflicting effects. However, lying behind much of that work is a simple model of a single union bargaining with a single firm which, in the absence of binding contracts, the union reduces the returns to innovation without bearing any of the costs. This misses an important feature of some R&D activity - its strategic competitive role in determining market share, a role which takes the form of a tournament. This feature is the focus of the model in this paper, where we explore the equilibrium outcomes in a model where firms compete in both the product market and R&D, and also have to strike a bargain with their workforce.

PD October 1990. **TI** The Choice of Environmental Policy Instruments and Strategic International Trade. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9012; Department of Economics, University of Southampton, Southampton, S09 5NH, ENGLAND. **PG** 29. **PR** no charge. **JE** Q25, Q28, F11. **KW** Environmental Policy. Environment. International Trade. Taxes.

AB In this paper I examine the question of the choice of environmental policy instruments in the context of a model of strategic international trade between countries, and I show that in such a model there is a preference for the use of standards rather than taxes as policy instruments. The paper employs a simple model of two countries who are the sole producers of a commodity sold on the world market. Production uses an input which is directly related to the emission of a pollutant, and each country has a fixed target for the emissions level it wishes to achieve. If trade is modeled as a one-shot Cournot equilibrium, the countries are indifferent about policy choice. If trade is modeled as a Stackelberg equilibrium, then both countries are better off (in terms of producer surplus) if the follower uses standards.

Ulph, D. T.

TI Labor Markets and Innovation: Ex-Post Bargaining. **AU** Ulph, Alistair M.; Ulph, D. T.

Vainiomaki, J.

PD February 1991. **TI** The Effects of Changes in a Firm's Product Market Power on Wages. **AU** Vainiomaki, J.; Wadhvani, S. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 18; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 33. **PR** no charge. **JE** L11, J31. **KW** Market Share. Market Power. Wages.

AB Using firm-level panel data, this paper argues that increases in a firm's market share or a rise in the industry concentration ratio both serve to increase wages. On these estimates, actual changes in the "product market power" variables could have generated a wage gap of up to 13.5 per cent over the period 1976-82. These results are consistent with various rent sharing hypotheses, although there is some evidence that the extent of rent sharing is greater in union firms.

van der Ploeg, Frederick

TI Endogenous Growth and Overlapping Generations. **AU** Alogoskoufis, George S.; van der Ploeg, Frederick.

PD January 1991. **TI** Budgetary Aspects of Economic and Monetary Integration in Europe. **AA** Tilburg University. **SR** Centre for Economic Policy Research Discussion Paper: 492; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 34. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** E62, E63, F42, F15. **KW** Monetary Union. Policy Coordination. International Policy. Public Sector. Public Finance.

AB This paper analyzes some of the implications of the proposals of the Delors Committee for monetary and fiscal policies in Europe. The merits of the independent ESCB are discussed. We offer four reasons why, in the absence of European coordination of budgetary policies, the size of the public sector will be too small relative to the first-best outcome: first, with an independent central bank seigniorage revenues will only accrue through real growth, so that taxes must be raised and exhaustive public spending must be cut; second, an economic union means that spending by an individual treasury benefits the other treasuries, so that there is an inadequate provision of public goods, third, international competition drives tax rates down and leaves fewer funds for the public sector; fourth, an appreciation of the real exchange rate of Europe has the nature of a public good, hence the level of exhaustive public spending tends to be too low.

PD January 1991. **TI** Channels of International Policy Transmission. **AA** Tilburg University. **SR** Centre for Economic Policy Research Discussion Paper: 491; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F42, F32, F41. **KW** International Policy. Policy Coordination. Current Account.

AB A two-country, intertemporal, perfect-foresight model with micro foundations, floating exchange rates, uncovered interest parity, and nominal wage rigidities is formulated. The benchmark case corresponds to unit elasticities of intertemporal

and intratemporal substitution in consumption, no initial holdings of foreign assets and infinite lifetimes. Monetary disinflation and an increase in government spending then have no spillover effects on foreign consumption and employment and there are no current account dynamics. Four channels of international policy transmission are then analyzed. The first is based on capital gains on holdings of foreign assets. The spillover effects arising through the second and third channel depend on whether goods are gross substitutes or gross complements and on whether the elasticity of intertemporal substitution is less or greater than unity. The final channel assumes finite lifetimes and no bequest motive.

TI Money and Growth Revisited. **AU** Alogoskoufis, George S.; van der Ploeg, Frederick.

TI Debts, Deficits and Growth in Interdependent Economies. **AU** Alogoskoufis, George S.; van der Ploeg, Frederick.

Verdier, Thierry

TI "Secret" Buy-Backs of LDC Debt. **AU** Cohen, Daniel; Verdier, Thierry.

Vieu, Philippe

TI Kernel Regression Smoothing of Time Series. **AU** Hardle, Wolfgang K.; Vieu, Philippe.

Vinals, Jose

TI Macroeconomic Policy, External Targets and Constraints: The Case of Spain. **AU** Dolado, Juan; Vinals, Jose.

Vines, David

TI Adjustment Difficulties within a European Monetary Union: Can They be Reduced? **AU** Hallett, Andrew Hughes; Vines, David.

Vishny, Robert W.

TI Window Dressing by Pension Fund Managers. **AU** Lakonishok, Josef; Shleifer, Andrei; Thaler, Richard; Vishny, Robert W.

TI Asset Sales and Debt Capacity. **AU** Shleifer, Andrei; Vishny, Robert W.

von Ungern-Sternberg, Thomas

PD January 1991. **TI** Quality Incentives in Auctions for Construction Contracts. **AA** Universite de Lausanne. **SR** Universite de Lausanne Cahiers de Recherches Economiques: 9101; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne BFSH - Dornigny, CH-1015 Lausanne/SWITZERLAND. **PG** 25. **PR** no charge. **JE** L74, D44, L15. **KW** Auctions. Construction. Product Quality.

AB Construction projects are frequently awarded on the basis of auctions. The winning project is selected not only on the basis of price, but also a variety of quality characteristics. Coming up with a high quality project may require (substantial) up-front investments. This paper studies the reasons for opting for such a one shot auction procedure, and the relative weight the auctioneer should attach to quality when selecting the winning project. It is shown that the optimal weight may be substantially higher than his own marginal utility of quality. As a result it may be quite difficult to detect favoritism in the

process of selecting the winner.

Waddell, James A.

TI The Changing Fortunes of FHA's Mutual Mortgage Insurance Fund and the Legislative Response. **AU** Hendershott, Patric H.; Waddell, James A.

Wadhvani, S.

TI The Effects of Changes in a Firm's Product Market Power on Wages. **AU** Vainiomaki, J.; Wadhvani, S.

Wadsworth, Jonathan

TI Who are the Unemployed? **AU** Pissarides, Christopher; Wadsworth, Jonathan.

Wang, Ruqu

PD March 1991. **TI** Strategic Behavior and Information Revelation in Dynamic Auctions. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 807; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 30. **PR** \$3.00 Canada and U.S.; \$3.50 Foreign. **JE** D44, D82. **KW** Auctions. Private Information.

AB In this paper, we study a two-period common-value auction model in which the seller possesses some private information about the value of the object being sold. Even though the probability of revealing his information in a later period could be different, the seller's equilibrium strategy is similar and information revealing: sell late if and only if the information is favorable enough. We also show that it is the seller's best policy to always reveal his private information in some equilibria but not in others. One implication of the model is that the owner's ability to sell on more occasions generally reduces his expected revenue.

Warshawsky, Mark

TI The Impact of Liabilities for Retiree Health Benefits on Share Prices. **AU** Mittelstaedt, H. Fred; Warshawsky, Mark.

Weale, Martin

TI On the Measurement of Well-Being. **AU** Dasgupta, Partha; Weale, Martin.

Weber, Guglielmo

PD November 1990. **TI** Earnings-Related Borrowing Restrictions: Empirical Evidence from a Pseudo Panel for the U.K. **AA** University College London and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/15; Institute for Fiscal Studies, 7 Ridgmount Street, London WC1E 7AE, ENGLAND. **PG** 28. **PR** 3 pounds. **JE** D91, E51, D12. **KW** Consumption. Liquidity Constraints. Life Cycle Model. Borrowing.

AB The life cycle model with liquidity constraints produces an Euler equation with unobservable Kuhn-Tucker multipliers. If borrowing restrictions depend on earnings and leisure is a choice variable one can derive an Euler equation involving only observable variables. I estimate the Euler equation on a Pseudo (or "synthetic") panel of U.K. households, and find that most parameters are well determined. I can then use the estimated coefficients to evaluate each cohort's Kuhn-Tucker multiplier over the sample period.

Wegge, Leon L.

PD February 1991. **TI** International Transportation in the Heckscher-Ohlin Model. **AA** University of California at Davis. **SR** University of California at Davis Economics Department Working Paper: 378; Department of Economics, University of California at Davis, Davis, California 95616-8578. **PG** 26. **PR** no charge. **JE** F11, F41, R40. **KW** Transportation. World Equilibrium. International Trade. **AB** Trade models with local transportation firms carrying the country's imports have appeared in the literature, but standard HO models containing transport firms that compete in the international transport markets do not seem to have been advanced. We present a model in this direction. The analysis follows the insight that world prices p can not clear world markets without international freight rates f , one rate for each good, simultaneously clearing the markets for international transportation. We derive the comparative static model for this world transportation equilibrium in a setting when transportation services are provided both ways by competing domestic and foreign transportation sectors in a world consisting of two countries.

Weiss, Andrew

TI A Signaling Theory of Unemployment. **AU** Ma, Ching-to Albert; Weiss, Andrew.

Weiss, Yoram

PD March 1991. **TI** Synchronization of Work Schedules. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 12-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 28. **PR** no charge. **JE** J22, J21. **KW** Communication. Tastes. Time Allocation. Labor Force. **AB** The paper attempts to explain bunching and synchronization of work schedules. The emphasis is on interactions associated with communication. The productivity of each worker increases with the number of related workers who work at the same time. Thus workers have an incentive to voluntarily align their working schedules. Perfect synchronization can arise even if workers differ in tastes. Then there is a tendency to conform to the work habit of the most work averse person in the group. In the absence of coordination the commonly chosen work day is too short.

Whalley, John

TI Internal Quota Allocation Schemes and the Costs of the MFA. **AU** Trela, Irene; Whalley, John.

TI Decomposing the Welfare Costs of Capital Tax Distortions: The Importance of Risk. **AU** Hamilton, Bob; Mintz, Jack M.; Whalley, John.

White, Eugene N.

TI Was there a Bubble in the 1929 Stock Market? **AU** Rappoport, Peter; White, Eugene N.

Whiteman, Charles H.

TI Worldwide Persistence, Business Cycles, and Economic Growth. **AU** Riezman, Raymond G.; Whiteman, Charles H.

Wickens, M. R.

TI Currency Substitution and Vehicle Currencies: Tests of Alternative Hypotheses for the Dollar, DM and Yen.

AU Thomas, S. H.; Wickens, M. R.

Wilcox, David W.

TI Monetary Policy and Credit Conditions: Evidence from the Composition of External Finance. **AU** Kashyap, Anil K.; Stein, Jeremy C.; Wilcox, David W.

Wilde, Louis L.

TI Expert Opinions and Taxpayer Compliance: A Strategic Analysis. **AU** Graetz, Michael A.; Reinganum, Jennifer; Wilde, Louis L.

TI The Effect of Audit Rates on Federal Income Tax Filings and Collections, 1977-1986. **AU** Dubin, Jeffrey A.; Graetz, Michael A.; Wilde, Louis L.

Wolsey, Laurence A.

TI Integral Polyhedra with a Cardinality Constraint. **AU** Aghezzaf, El Houssaine; Wolsey, Laurence A.

Woo, Wing Thye

PD February 1991. **TI** Integrating the Real Exchange Rate into Growth-Oriented Macroeconomic Management. **AA** University of California at Davis. **SR** University of California at Davis Economics Department Working Paper: 375; Department of Economics, University of California at Davis, Davis, California 95616-8578. **PG** 90. **PR** no charge. **JE** F31, F42, O19, O12. **KW** Exchange Rate. Economic Development. Policy Coordination. Economic Growth.

AB "Getting the prices right" is generally given the microeconomic interpretation of laissez-faire. Our contentions are that the microeconomic emphasis is unjustified and that the identification with laissez-faire is wrong. We will develop three points in this paper to support our contentions. The first is that the evidence in support of the growth-enhancing properties of "getting the prices right" are more accurately evidence in support of the growth-enhancing properties of "getting the real exchange rate right." The second point is that successful development strategies have been based on the harnessing of market forces toward the achievement of broad goals rather than on the reliance on laissez-faire policies. Our third point is that the real exchange rate is a major transmission mechanism through which macroeconomic policies affect economic growth.

Wright, Randall

TI Homework in Macroeconomics: Household Production and Aggregate Fluctuations. **AU** Benhabib, Jess; Rogerson, Richard; Wright, Randall.

TI Indivisibilities, Lotteries, and Sunspot Equilibria. **AU** Shell, Karl; Wright, Randall.

TI A Note on Labor Contracts with Private Information and Household Production. **AU** Nosal, Ed; Rogerson, Richard; Wright, Randall.

PD February 1991. **TI** A Discussion of Cooley and Hansen's "Welfare Costs of Moderate Inflation". **AA** University of Pennsylvania and Federal Reserve Bank of Minneapolis. **SR** Federal Reserve Bank of Minneapolis Staff Report: 134; Research Department, Federal Reserve Bank of Minneapolis, 250 Marquette Ave, Minneapolis, MN 55401. **PG** 10. **PR** no charge. **JE** F31, E41, E13, E63.

KW Money. Inflation. Welfare. Taxes.

AB This is a note on the analysis of inflation and taxation in Cooley and Hansen's cash-in-advance economy described in their paper "The Welfare Costs of Moderate Inflation." Basic issues concerning the costs and consequences of inflation are considered, their results are assessed, and some directions for extensions are suggested.

TI Why is Automobile Insurance in Philadelphia so Damn Expensive? **AU** Smith, Eric; Wright, Randall.

Wyplosz, Charles

PD January 1991. **TI** Monetary Union and Fiscal Policy Discipline. **AA** INSEAD, France. **SR** Centre for Economic Policy Research Discussion Paper: 488; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 41. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F36, F33, E63. **KW** Fiscal Policy. Monetary Integration. Monetary Policy.

AB The possible emergence of a monetary union in Europe raises a number of new and difficult questions. A central concern is the implication for fiscal policy-making. Fiscal policy assumes an increased importance once the monetary policy instrument is lost. The Delors Report has suggested that there may be a bias towards less discipline. This paper, which focuses on the longer run, is a preliminary attempt at sorting out the issues. It considers how both the incentives and the constraints on fiscal policy may be affected. There is no Delors-type, clear-cut conclusion emerging. The most obvious conclusion is that eventually a monetary union requires some degree of fiscal federalism.

PD March 1991. **TI** Post-Reform East and West: Capital Accumulation and the Labor Mobility Constraint. **AA** INSEAD, France. **SR** Centre for Economic Policy Research Discussion Paper: 528; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** F22, J61, O15. **KW** Labor Mobility. Immigration. Economic Reform.

AB Assuming that economic reforms are successful in Eastern Europe, what will be the effects on Western Europe? The focus is on the wage pressure that the threat of migration from East to West is likely to impose. The paper adopts a Ramsey model of intertemporal choice, for both individuals and firms. Costs of adjustment in the rate of capital accumulation allow for a study of both the transition period and the long-run equilibrium which arises when the East's productivity of capital has reached the Western level. The effects on the West take the form of an initial rise in the real interest rate, an early slow-down in investment and temporarily declining real wages. In the long-run, Western wealth rises through lending to the East. All these effects are reduced by the migration-induced wage pressure as less capital is accumulated in the East, with a correspondingly higher level of unemployment, both during the transition and in long-run.

PD March 1991. **TI** A Note on the Real Exchange Rate Effect of German Unification. **AA** INSEAD, France. **SR** Centre for Economic Policy Research Discussion Paper: 527; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 20. **PR** 1 pound (\$2) individuals; 1.50 pounds (\$3) companies, libraries, institutions. **JE** O52, F31, F33, F36. **KW** Monetary Union.

Exchange Rate. Devaluation. Germany.

AB It is often believed that the German Economic and Monetary Unification will result in an appreciation of the DM. This conclusion is reached when attention is exclusively directed to the short-run demand side. In this note, it is shown that supply-side and long-term considerations suggest instead that the DM will depreciate in the long-run. The reason is that the absorption into the new DM zone of an area with initially scant productive assets amounts to a permanent fall in per capita wealth of the new Germany relative to the old one. An alternative interpretation is that the real depreciation is required to compensate a worsened net asset position (as Germany borrows abroad to finance capital accumulation). While the short-run effect is ambiguous, a real depreciation is shown to be impossible, and the conditions for it to happen are spelled out.

Young, Alwyn

PD January 1991. **TI** Learning by Doing and the Dynamic Effects of International Trade. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 3577; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 41. **PR** \$2.00. **JE** F11, F14, F43, F13. **KW** Endogenous Growth. Growth Model. Free Trade. International Trade. Developing Countries.

AB Using an endogenous growth model in which learning by doing, although bounded in each good, exhibits spillovers across goods, this paper investigates the dynamic effects of international trade. Examining an LDC and a DC, the latter distinguished by a higher initial level of knowledge, under autarky and free trade, I find that under free trade the LDC (DC) experiences rates of technical progress and GDP growth less than or equal (greater than or equal) to those enjoyed under autarky. Unless the LDC's population is several orders of magnitude greater than that of the DC and the initial technical gap between the two economies is not large, the LDC will be unable to catch up with its trading partner.

Zieschang, Kimberly D.

TI A DEA Approach to the Problem of New and Disappearing Commodities in the Construction of Price Indices. **AU** Lovell, C. A. Knox; Zieschang, Kimberly D.

Zilcha, Itzhak

PD April 1991. **TI** Economic Growth with Technological Uncertainty: Efficient Stationary Plans. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 15-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, Israel. **PG** 18. **PR** no charge. **JE** O41. **KW** Growth Model. Economic Growth. Golden Rule.

AB In a one-sector growth model with uncertain technology we define efficient plans by using stochastic ordering and complete characterization of efficient (type I) stationary plans is attained. We also prove that for a given strictly concave utility there exists a stochastic modified golden rule, and its allocation is efficient (of type II).

Zwiebel, Jeffrey

TI Alcohol Consumption during Prohibition. **AU** Miron, Jeffrey A.; Zwiebel, Jeffrey.