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)

Aghion, P.

PD November 1992. **TI** Renegotiation Design with Unverifiable Information. **AU** Aghion, P.; Dewatripont, M.; Rey, P. **AA** Aghion: DELTA, EBRD and CEPR. Dewatripont: Universite Libre de Bruxelles, CEPR, and CORE. Rey: INSEE and CEPR. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9302; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 33. **PR** no charge. **JE** L14, D82. **KW** Contracts. Risk Sharing.

AB This paper considers a buyer-seller relationship with observable but unverifiable investments and/or random utility parameters. In such situations, it is known that contract renegotiation may prevent the implementation of first-best outcomes. In this paper, we show however that efficient investments and optimal risk-sharing can typically be achieved provided the initial contract is able to monitor the ex-post renegotiation process. Specifically, we focus on the following two features of renegotiation design. First, default options in case renegotiation breaks down; second, the allocation of all bargaining power to either contracting party. Moreover, we show that these two features can be obtained in standard Rubinstein bargaining games through contractual provisions, such as specific-performance clauses and penalties for delay (or, equivalently, financial "hostages" refundable without interest).

Altman, Edward I.

PD February 1993. **TI** Defaults and Returns on High Yield Bonds: Analysis Through 1992. **AA** New York University. **SR** New York University Salomon Brothers Working Paper: S-93-14; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 9. **PR** not available. **JE** G32, G10. **KW** Default Rates. High Yield Debt.

AB The high yield debt default rate was 3.4% in 1992, down considerably from the record high level of 10.3% in 1991. Face value of defaults was $5.55 billion in 1992, less than 30% of the prior year's total. The 3.4% default rate is based on a population of $163 billion -- an amount that does not include prior issues that are still trading while in default (approximately $31 billion as of mid-1992). Default losses were also substantially lower at 1.9% vs. 7.2% a year earlier. The 1992 loss rate is considerably lower than the average annual loss rate over the period 1985-1992 and more in line with historical averages going back to the early seventies. These default results imply a "return to normalcy". Total returns on the Merrill Lynch High Yield Master Index in 1992 was 18.2%, an 11.7% spread over 10-year U.S. Treasury bonds, bringing the compound average return spread to 1.76% per year over the

15-year period 1978-1992.

PD April 1993. **TI** Do Priority Provisions Protect a Bondholder's Investment? **AU** Altman, Edward I.; Eberhart, Allan C. **AA** Altman: New York University. Eberhart: Georgetown University. **SR** New York University Salomon Brothers Working Paper: S-93-15; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 22. **PR** not available. **JE** G12, G33, G14. **KW** Chapter 11. Default.

AB This study analyzes the return (loss) on defaulted firms' bonds from the time of issuance to eventual emergence from Chapter 11. We examine the extent to which priority provisions protect a bondholder's investments. Our sample is composed of 91 firms (with 232 bonds) that filed and completed Chapter 11 between 1980 and 1992. The bonds cover a wide spectrum of priority provisions. The results suggest that, despite widespread violations of the absolute priority rule, priority provisions offer substantial protection against the severity of default; senior bondholders suffer much lower losses than junior bondholders. Some of the results suggest that the more senior priority classes receive abnormally high returns whereas junior classes experience abnormally low returns. However, when the results are corrected for dependence of price movements among bonds from the same firm, they are generally consistent with efficiency.

Andersen, Torben M.

PD November 1992. **TI** Unemployment and Fiscal Policy in an Economic and Monetary Union. **AU** Andersen, Torben M.; Sorensen, Jan Rose. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1993-2; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 18. **PR** no charge. **JE** F33, F42, E24, J51, F12. **KW** Imperfect Competition. Policy Coordination.

AB The need and room for demand management policies as a way to control unemployment is considered in a general equilibrium model of an Economic and Monetary Union with imperfectly competitive product markets and unions setting wages. Balanced budget demand management policies are shown to affect employment, but they involve a beggar-thy-neighbor element since gains in employment are matched by employment losses in other countries in the Union. Uncoordinated policies are too expansionary, and optimal policies require constraints on the size of the public sector in the participating countries.

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Anderson Paul F.

TI Determining the Order and Direction of Multiple Brand Extensions. AU Dawar, Niraj; Anderson Paul F.

Angehrn, Albert

PD not available. TI Case-Based Decision Support. AU Angehrn, Albert; Dutta, Soumitra. AA INSEAD. SR INSEAD Working Papers: 93/16/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 16. PR not available. JE C88. KW Decision Support Systems. Decision Making.

AB An important focus of our research is the design of rich and flexible environments to facilitate and stimulate human decision-making processes. Case-based reasoning can play an important role in supporting interactive decision processes requiring human judgements and inputs. This paper models case-based reasoning as an autonomous agent in the decision-making environment to present a symbiotic decision support system in which both the decision-maker and the system benefit from each other. The case-based agent stimulates and facilitates the decision-making process (by using stored cases of prior decision/problem solutions) and learns from the decision maker by observing and storing current problem solving behaviors. Thus case-based reasoning is used to lead to a new form of proactive, conversational and provocative decision support environment. The experimental domain of multi-criteria decision making has been chosen for illustrating our ideas.

Aragones, Enriqueta

PD April 1993. TI A Dynamic Model of Multiparty Competition. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1044; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. PG 12. PR $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. JE D72. KW Voting. Electoral Competition. Median Voter.

AB We construct a dynamic voting model of three-party competition in order to capture the following facts: voters base their decision on past economic performance of the parties; parties and candidates have different objectives; finally, a candidate while in office can only have a small effect on the economy. The properties that characterize the electoral system are the following: each voter has a single vote to cast and there is a single-winner elected under plurality rule. Given the decision rule of the voters we have sincere voting and, because our voters do not consider the possibility of abstention, all votes are to be cast. We show the existence of equilibrium and the compatibility of the different objectives of parties and candidates. Our model may explain the emergence of ideologies and shows that in multicandidate elections held under the plurality system. Hotelling's principle of minimum differentiation is no longer satisfied.

Ayres, Leslie W.

TI Use of Materials Balances to Estimate Aggregate Waste Generation and Waste Reduction Potential in the U.S. AU Ayres, Robert U.; Ayres, Leslie W.

Ayres, Robert U.

PD November 1992. TI On National Wealth. AA INSEAD. SR INSEAD Working Papers: 92/67/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 13. PR not available. JE C82, H63. KW National Wealth. Labor Surplus.

AB Conventional national wealth statistics are seriously misleading, because they omit the largest single item of measurable wealth. The omitted item is the present value of future surplus personal labor income, or "potential personal labor surplus" (PPLS). The numerical value of this item can only be estimated indirectly, subject to significant uncertainty, which probably accounts for its omission. However, it appears to be several times larger than any other category of national wealth, accounting for roughly two thirds of the total. For this reason, concerns about the current magnitude of the national debt may be somewhat overblown (although the trends are sufficiently disturbing). There is also a major component of national wealth that cannot be measured with confidence by any methodology, namely the physical and biological environment, within which our economic system is "embedded". However, although there is no established method of accounting for this component, it cannot be dismissed as negligible.

PD November 1992. TI Commentary: Cowboys, Cornucopians and Long-Run Sustainability. AA INSEAD. SR INSEAD Working Papers: 93/10/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 23. PR not available. JE Q20, Q30. KW Environment. Neo-Malthusianism. Natural Resources.

AB In the 1970's there was a lively debate on the relationship between natural resource availability and long-run economic growth. One side has been characterized as "neo-Malthusian". It emphasized the limited global "stockpile" of critical natural resources, and the need to curb population and economic growth. The other side of the debate has been characterized as "cornucopian". It emphasized the creative powers of technology and free-markets to find substitutes for any and all scarce resources. This paper argues that the original dichotomy was false. It did not adequately represent either the real positions of most conservative business and political leaders today. Nor did it reflect the currently emerging consensus among environmentalists.

PD January 1993. TI On National Wealth. AA INSEAD. SR INSEAD Working Papers: 93/14/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 16. PR not available. JE O47, H62, C82. KW Labor Income. Growth. Environment.

AB Conventional national wealth statistics are seriously misleading, because they omit the present value of future surplus personal labor income, or "potential personal labor surplus" (PPLS). The numerical value of this item can only be estimated indirectly and with significant uncertainty. However, it appears to be several times larger than any other category of national wealth. For this reason, concerns about the absolute magnitude of the federal deficit in relation to the national debt may be somewhat excessive. There is a further component of national wealth that cannot be measured with confidence by any existing methodology, namely the physical and biological environment within which our economic system is embedded.

PD February 1993. TI Industrial Metabolism of Nitrogen. AU Ayres, Robert U.; Norberg-Bohm, Vicky AA Ayres: INSEAD. Norberg-Bohm: Harvard University. SR INSEAD Working Papers: 93/11/EPS/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 21.

PR not available. **JE** L65. **KW** Chemical Inputs. Production Losses.
AB This paper quantitatively reviews the sources, production processes and economic uses of nitrogen-based chemicals, especially ammonia and its derivatives. It attempts to account for production losses, by species, and for losses in use, especially in agriculture. It also discusses sources of NO sub x via high temperature combustion processes, especially internal combustion engines and thermal power plants. Data is presented mainly for the U.S. in 1988.

PD February 1993. **TI** Use of Materials Balances to Estimate Aggregate Waste Generation and Waste Reduction Potential in the U.S. **AU** Ayres, Robert U.; Ayres, Leslie W. **AA** INSEAD. **SR** INSEAD Working Papers: 93/12/EPS/ENV/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 17. **PR** not available. **JE** D24. **KW** Production Wastes. Transformation Process.
AB The paper is a systematic derivation of aggregate production wastes for the U.S. economy (c. 1988). In principle, each industrial sector is thought of as a transformation process, converting material (and energy) inputs to outputs. Both inputs and outputs are published in well-established government statistics, with rare exceptions. This makes it possible to use the materials-balance methodology by comparing aggregate inputs and outputs. Some knowledge of the transformation processes themselves is occasionally needed, but except in the chemical industry (which we do not consider in this paper) process information is of secondary importance. We compare the results of this "bottom up" approach with other estimates of waste residuals. In several cases, significant discrepancies have been identified. However, the major value of this approach is to clearly distinguish between dry and wet wastes. Our approach is probably superior to the conventional one in this regard.

Bagwell, Kyle
PD May 1993. **TI** Multilateral Tariff Cooperation During the Formation of Regional Free Trade Areas. **AU** Bagwell, Kyle; Staiger, Robert W. **AA** Bagwell: Northwestern University. Staiger: Stanford University and National Bureau of Economic Research. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1048; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. **PG** 37. **PR** $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. **JE** F13. **KW** Trade Policy. Trade Agreements.
AB We explore the impact of the formation of regional free trade agreements on the ability of countries to maintain low cooperative multilateral tariffs. We assume that countries can not make binding international commitments, but are instead limited to self-enforcing arrangements. Specifically, we model cooperation in multilateral trade policy as involving a constant balance between, on the one hand, the gains from deviating unilaterally from an agreed-upon trade policy, and on the other, the discounted expected future benefits of maintaining multilateral cooperation, with the understanding that the latter would be forfeited in the trade war which followed a unilateral defection in pursuit of the former. In this context, we explore the way in which the formation of regional free trade agreements upsets the balance between current and future conditions, and trace through the dynamic ramifications of

these effects for multilateral cooperation.

Baliga, Sandeep
PD May 1993. **TI** Multilateral Bargaining with Imperfect Information. **AU** Baliga, Sandeep; Serrano, Roberto. **AA** Baliga: Harvard University. Serrano: Brown University. **SR** Brown University Department of Economics Working Paper: 93-28; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 22. **PR** no charge. **JE** C78, C73, D82. **KW** Folk Theorem. Discount Factor. Sequential Bargaining.
AB We study two versions of a multilateral bargaining procedure in which responders are told only their own shares. In the "unanimity" game, for a significant range of values of the discount factor, the set of equilibrium agreements is a singleton when discounting is high. When it is low, there is multiplicity of equilibria and a "folk" theorem type of result is established. In the "exit" game, for every value of the discount factor, there is a unique equilibrium that coincides with that found in the literature for the same model with either perfect or almost perfect information. Therefore, the results already known for multilateral sequential bargaining are extended without change to the case of imperfect information.

Ball, Laurence
PD March 1993. **TI** What Determines the Sacrifice Ratio? **AA** Princeton University. **SR** National Bureau of Economic Research Working Paper: 4306; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** $5.00. **JE** E31, E65. **KW** Disinflation.
AB This paper investigates the determinants of the "sacrifice ratio" for disinflation: the ratio of the loss in output to the fall in trend inflation. I develop a method for estimating the sacrifice ratio in individual disinflation episodes, and apply it to 65 episodes in moderate-inflation OECD countries. In this sample, the sacrifice ratio is decreasing in the speed of disinflation: cold turkey is less costly than gradualism. The ratio is also decreasing in the flexibility of wage-setting institutions. The openness of the economy has no effect on the ratio, and the effects of incomes policies and the initial level of inflation are unclear.

Barrionuevo, Jose M.
PD December 1992. **TI** Inflation and Fiscal Deficits: The Irrelevance of Debt and Money Financing. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 92/102; International Monetary Fund, Washington, DC 20431. **PG** 13. **PR** not available. **JE** E31, H62, E62, E51. **KW** Cash in Advance. Public Debt.
AB The purpose of this paper is to present a model that circumvents the requirement of explicitly setting a period in which the fiscal budget is to be balanced, yet implies that increases in the growth of public debt are bound to increase inflation when there is no perceived commitment to reduce the fiscal deficit. The model is based on a modified version of the cash in advance constraint. The results of numerical simulations suggest that an increase in the growth of debt to finance current consumption leads to an equal increase in inflation. The timing of this increase varies with the size of the deficit and the pace of economic growth. It is shown that small increases in small deficits yield fairly significant increases in inflation. Three policy conclusions are offered.

Barron, John M.
PD April 1992. **TI** Gender Differences in Training, Capital, and Wages. **AU** Barron, John M.; Black, Dan A.; Loewenstein, Mark A. **AA** Barron: Purdue University. Black: University of Kentucky. Loewenstein: Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 224; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 34. **PR** no charge. **JE** J31, J71. **KW** Wage Determination. Discrimination.
AB not available.

Battigalli, Pierpaolo
PD March 1993. **TI** Synchronic Information and Common Knowledge in Extensive Games. **AU** Battigalli, Pierpaolo; Bonanno, Giacomo. **AA** Battigalli: Politecnico di Milano. Bonanno: University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-11; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 16. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** C72. **KW** Common Knowledge. Information Functions.
AB Restricting attention to extensive forms with a multi-stage structure and perfect recall, we specify the information of each player at each node of the game-tree in a way which is coherent with the original information structure of the extensive form. This approach provides a framework for a formal and rigorous treatment of questions of knowledge and common knowledge at every node of the tree. We construct an information function and show that it is the finest, that is, the most informative, in the class of information functions that satisfy five natural properties. Using this information function we are able to provide an alternative characterization of the notion of common knowledge. We also show that, using this most informative function, it is indeed true (as normally argued at an informal level) that at any node in a subgame it is common knowledge among all the players that the play of the game has reached that subgame, and that in simultaneous games at every decision node the only event which is common knowledge among all the players is the certain event.

Bauwens, Luc
PD July 1992. **TI** Estimating End-Use Demand: A Bayesian Approach. **AU** Bauwens, Luc; Fiebig, Denzil; Steel, Mark. **AA** Bauwens: Catholic University of Louvain. Fiebig: University of Sydney. Steel: Tilburg University and Universidad Carlos III, Madrid. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9252; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 27. **PR** not available. **JE** C11, D12. **KW** Conditional Demand Analysis. Bayesian Analysis.
AB Eliminating negative end-use or appliance consumption estimates and incorporating direct metering information into the process of generating these estimates; these are two important aspects of conditional demand analysis (CDA) that will be the focus of this paper. In both cases a Bayesian approach seems a natural way of proceeding. What needs to be investigated is whether it is also a viable and effective approach. In addition, such a framework naturally lends itself to prediction. Our application involves the estimation of electrical appliance consumptions for a sample of Australian households. This application is designed to illustrate the viability of a full Bayesian analysis of the problem.

Bayoumi, Tamim A.
PD December 1992. **TI** U.S. State and Local Government Finances over the Current Cycle. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 92/112; International Monetary Fund, Washington, DC 20431. **PG** 19. **PR** not available. **JE** H71, H72, E62. **KW** Taxation. Expenditures.
AB The recent slowdown in the U.S. economy has led to state and local government tax increases and expenditure cuts that have lowered aggregate demand, in contrast to earlier downturns when the sector provided significant automatic stabilizers. Several explanations for this change are examined, including the role of federal grants, mandates, tax revolts, and compensation. The first three factors are found to be relatively unimportant. There does, however, appear to have been a large change in relative compensation over the 1980's, which can account for much of the deterioration in finances.

PD March 1993. **TI** Economic Consequences of Lower Military Spending: Some Simulation Results. **AU** Bayoumi, Tamim A.; Hewitt, Daniel P.; Schiff, Jerald. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/17; International Monetary Fund, Washington, DC 20431. **PG** 26. **PR** not available. **JE** C53, H56, F47. **KW** Military Cutbacks.
AB The IMF MULTIMOD model is used to trace the economic impact of a 20 percent reduction in world military expenditures. GDP falls in the short run, however private consumption and investment rise, leading to an increase in GDP in the medium and long run. The estimated gains to economic welfare are substantial, particularly for developing countries, although most of these gains are realized in the long run. A positive international economic externality is found to exist, implying that for any given country the economic gains from a coordinated reduction in military expenditures exceed the gains from a unilateral reduction.

PD March 1993. **TI** Monetary and Exchange Rate Arrangements for NAFTA. **AU** Bayoumi, Tamim A.; Eichengreen, Barry. **AA** Bayoumi: International Monetary Fund. Eichengreen: University of California, Berkeley and National Bureau of Economic Research. **SR** International Monetary Fund Working Paper: WP/93/20; International Monetary Fund, Washington, DC 20431. **PG** 31. **PR** not available. **JE** F13, F15, F31, F33, F36. **KW** Common Currency Area. Monetary Union. Free Trade.
AB This paper considers the extent to which the North American Free Trade Area (NAFTA) meets the criteria for a common currency area. NAFTA is compared with the EC, a regional grouping for which initial plans for a monetary union are already in place. Most of the anticipated benefits from a monetary union in the EC apply with equal force to NAFTA. However, because the underlying disturbances are more diverse across members of NAFTA, the costs of abandoning the exchange rate instrument are likely to be higher. This is particularly true when NAFTA is compared to the EC's continental core.

Beaulieu, John Joseph
PD April 1993. **TI** Optimal Durable and Nondurable Consumption with Transactions Costs. **AA** Board of Governors of the Federal Reserve System. **SR** Board of

Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-12; C/O Stephen A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 34. **PR** no charge. **JE** E21, G12, C61. **KW** Optimization. Durable Goods.
AB This paper considers the optimal purchase of durable and nondurable goods when adjusting one's durable stock is costly and when durables and nondurables interact in utility. The complexity of the solution of the model is reduced from solving a differential equation to the solution of six simultaneous non-linear equations. The paper also analyzes the effects of transactions costs of durable goods on nondurable consumption. When the durable stock is updated, nondurable consumption also jumps. These results are discussed in the context of previous work on Euler equation and asset pricing models.

PD April 1993. **TI** Utilizing Cross-Sectional Evidence in Modeling Aggregate Time Series: Consumer Durables with Fixed Costs of Adjustment. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-13; C/O Stephen A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 22. **PR** no charge. **JE** E21, D12. **KW** Durable Stock. Consumption. Transactions Costs.
AB The paper uses a model of the optimal purchase of durables and nondurable goods under transactions costs to characterize the ratio of the durable stock to nondurable consumption. The paper estimates the important parameters of the model using a data set of individual families' holdings and purchases. The microeconomic model is aggregated, and the implications for macroeconomic modeling are illustrated.

Benabou, Roland
PD April 1993. **TI** Heterogeneity, Stratification, and Growth. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4311; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 32. **PR** $5.00. **JE** O41, O15, D31, H72. **KW** Segregation. Integration. Local Externalities.
AB We examine how economic stratification affects inequality and growth over time. We study economies where heterogeneous agents interact through local public goods or externalities (school funding, neighborhood effects) and economy-wide linkages (complementary skills, knowledge spillovers). We compare growth and welfare when families are stratified into homogeneous local communities and when they remain integrated. Segregation tends to minimize the losses from a given amount of heterogeneity, but integration reduces heterogeneity faster. Society may thus face an intertemporal tradeoff: mixing leads to slower growth in the short run, but to higher output or even productivity growth in the long run. This tradeoff occurs in particular when comparing local and national funding of education, which correspond to special cases of segregation and integration. More generally, we identify the key parameters which determine which structure is more efficient over short and long horizons. Particularly important are the degrees of complementarity in local and in global interactions.

Berger, Allen N.
PD March 1993. **TI** Lines of Credit, Collateral, and Relationship Lending in Small Firm Finance. **AU** Berger, Allen N.; Udell, Gregory F. **AA** Berger: Board of Governors of the Federal Reserve System. Udell: New York University. **SR** New York University Salomon Brothers Working Paper: S-93-17; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 30. **PR** not available. **JE** G32, G21, L14, D82. **KW** Secured Loans. Asymmetric Information. Lending Contracts.
AB Bank lines of credit (L/C's) represent a critical source of finance for small firms. Because L/C's tend to exacerbate asymmetric information problems, these contracts are ideal for studying the role of collateral and relationship lending as solutions to these problems. Using a new data set on small firm L/C's, we find that banks more often require collateral from riskier firms and firms with shorter relationships. Also, loans to borrowers with shorter relationships and some types of secured loans tend to be riskier. The results are consistent with conventional wisdom about collateral and theoretical arguments that relationship lending generates valuable information.

Bergin, James
PD May 1992. **TI** Implementation in Generic Environments. **AU** Bergin, James; Sen, Arunava. **AA** Bergin: Queen's University. Sen: Indian Statistical Institute. **SR** Queen's Institute for Economic Research Discussion Paper: 879; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 14. **PR** $3.00 + GST Canada; $3.50 U.S. and Foreign. **JE** D71, C70. **KW** Social Choice Functions. Dense Domains.
AB In this paper, we study implementation in "economic environments." It is shown that there is a dense subset of the set of preference profiles such that given an arbitrary social choice function, f, and epsilon > 0, there exists another social choice function f(epsilon), f(epsilon) within epsilon of f uniformly, and f(epsilon) implementable in Nash equilibrium on the dense subset.

PD December 1992. **TI** Anonymous Sequential Games - Existence and Characterization of Equilibria. **AU** Bergin, James; Bernhardt, Dan. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 880; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 20. **PR** $3.00 + GST Canada; $3.50 U.S. and Foreign. **JE** C73, D81, C62. **KW** Aggregate Uncertainty.
AB In this paper we consider Anonymous Sequential Games with Aggregate Uncertainty. We prove existence of equilibrium when there is a general state space representing aggregate uncertainty. When the economy is stationary and the underlying process governing aggregate uncertainty Markov, we provide Markov representations of the equilibria.

Berlin, Mitchell
PD January 1993. **TI** Financial Intermediation as Vertical Integration. **AU** Berlin, Mitchell; Mester, Loretta J. **AA** Berlin: New York University. Mester: University of Pennsylvania and Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working

Paper: 93-3; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 21. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** L22, G21, G14. **KW** Banks. Loans.
AB We model the bank as a vertically integrated firm, in which loan origination and loan funding are carried out by separate firms. In a world with costly information production, but no information asymmetries between originating and funding firms, we show that banks can arise in equilibrium given sufficient uncertainty about the total supply of available funds, because banks will weaken the competition for funds. We also present results relating the relative profitability of intermediation to the information technology--more accurate public information decreases the incentives to form a bank.

Bernhardt, Dan
TI Anonymous Sequential Games - Existence and Characterization of Equilibria. **AU** Bergin, James; Bernhardt, Dan.

Bernstein, Jeffrey I.
PD March 1993. **TI** Production, Financial Structure and Productivity Growth in U.S. Manufacturing. **AU** Bernstein, Jeffrey I.; Nadiri, M. Ishaq. **AA** Bernstein: Carleton University and National Bureau of Economic Research. Nadiri: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4309; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** D21, D82, G32, G35, L60. **KW** Dividends. Corporate Debt. Agency Costs.
AB The purpose of this paper is to estimate a model that incorporates the effects of financial decisions on production, profitability, and productivity growth. Asymmetric information generates agency costs of debt and signaling benefits of dividends which then influence production decisions. The model is applied to the U.S. manufacturing sector. Agency costs and signaling benefits are measured by their effects on profitability. A one percent increase in debt reduces variable profit by 0.04 percent, while a one percent increase in dividends raises variable profit by 0.12 percent. Agency costs also limit the adjustment of U.S. manufacturing to long-run equilibrium. The dynamic efficiency of the manufacturing sector is affected by financial considerations. Signaling benefits contribute 4.2 percent to total factor productivity growth, while agency costs reduce efficiency by 3.3 percent. Thus the financial effects on dynamic efficiency approximately offset each other.

Bier, Willem
PD December 1992. **TI** Macroeconomic Models for the PC. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 92/110; International Monetary Fund, Washington, DC 20431. **PG** 32. **PR** not available. **JE** C88, E61, E17. **KW** Econometric Software. Computer Program. Policy Simulations.
AB This paper describes a computer program with which one can build macroeconomic models. It is possible to specify up to eighteen behavioral equations, each with between five and eleven independent variables. For certain variables, the user can decide whether they will be endogenous or exogenous. Many policy simulations dealing with adjustment and growth

issues can be performed with this program by varying any of the exogenous variables, and these experiments can be repeated for different model specifications. This paper describes a number of experiments with a model of an open economy where output and prices are endogenous.

Black, Dan A.
TI Gender Differences in Training, Capital, and Wages. **AU** Barron, John M.; Black, Dan A.; Loewenstein, Mark A.

PD May 1992. **TI** Bidding for Workers. **AU** Black, Dan A.; Loewenstein, Mark A. **AA** Black: University of Kentucky. Lowenstein: Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 226; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 27. **PR** no charge. **JE** J64, J41, D83. **KW** Search Theory. Auctions. Wage Determination.
AB This paper analyzes a labor market characterized by job matching and nonsequential search. Workers wages are determined by a simple auction mechanism: after searching potential employers, a worker auctions his labor services to the highest bidder. It is shown that there exists a nondegenerate equilibrium wage distribution and that the equilibrium level of search intensity will generally be inefficient. When the model is extended to allow for an endogenous division of search costs, the resulting Nash equilibrium has the feature that employers pay search subsidies to job applicants. These subsidies typically induce additional inefficient search.

Blanchflower, David
PD March 1993. **TI** Entrepreneurship, Happiness and Supernormal Returns: Evidence from Britain and the U.S. **AU** Blanchflower, David; Oswald, Andrew. **AA** Blanchflower: Dartmouth College, National Bureau of Economic Research and London School of Economics. Oswald: Oxford University and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 134; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 15. **PR** no charge. **JE** M13, J26. **KW** Job Satisfaction. Rents.
AB Do entrepreneurs earn supernormal returns, or does competitive pressure ensure that entrepreneurs receive the same utility level as workers? If those who run their own businesses get supernormal returns (or "rents") they should be happier than those who work as employees. The paper tests this hypothesis. It uses survey data from Britain and the United States to show that, in comparison with those in regular forms of employment, the self-employed report significantly higher levels of utility as proxied by overall satisfaction data.

Blank, Rebecca M.
PD April 1993. **TI** Evaluating the Connection Between Social Protection and Economic Flexibility. **AU** Blank, Rebecca M.; Freeman, Richard B. **AA** Blank: Northwestern University and National Bureau of Economic Research. Freeman: Harvard University, London School of Economics and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4338; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** $5.00. **JE** J23, J26, J38, J64. **KW** Unemployment. Labor Market Flexibility. Social Programs.

AB   Over the last 10 years, a variety of analysts have blamed high unemployment and stagnant economic growth in Europe on inflexible labor markets and pointed to the U.S. as a more flexible economy, due to its less regulated labor markets and less generous social protection programs. This paper reviews that debate, critiques the arguments about the relationship between social protection programs and labor market adjustment, and reviews the research literature on this topic. In general, we conclude that much less is known about the aggregate effects of social protection programs on the economy than is generally claimed. Within the very limited existing research, there is little evidence of a significant trade-off between social programs and labor market adjustment, although there is also not much evidence to support those who claim that social protection promotes economic growth. The paper ends by suggesting future research directions.

Bleaney, Michael

AB   The effect of insider domination of unions is considered in the context of a macroeconomic policy game between government and unions. The game revolves around a wage-devaluation spiral. Insider domination results in a deflationary bias in the presence of uncertainty. The government may benefit from a deliberate randomization of its policy.

Boadway, Robin W.

AB   A classic argument in the theory of crime is that optimal enforcement policy should involve maximal sanctions combined with minimal detection costs, yet this is rarely observed in the real world. We argue that one reason for this has to do with the time inconsistency of such a policy. If sanctions are only applied after a crime has been committed, the enforcement authority may be reluctant to impose a high sanction since it will no longer have any deterrent effect. We show in a simple one period setting that if the enforcement authority can commit to its announced sanctions, the classic result is obtained. However, if the enforcement authority cannot commit, a minimal sanction with no enforcement effort is obtained. These extreme outcomes can be avoided in a setting in which crimes and enforcement occur repeatedly and the authority is able to build a reputation.

Bodman, Phillip M.

University of British Columbia and Queen's University.
AB   There has been a great deal of research on trade unions and wage contracts in recent years, but there has been relatively little work on the determinants of contract length. This is unusual given that the duration of union contracts has varied substantially in post-war industrial economies both across time and across countries. This paper reviews the existing literature on contract duration and presents as simple explanation of optimal contract length for a wage setting trade union in a dynamic, uncertain environment. It is argued that optimal contract duration depends on a basic welfare trade-off between the benefits of wage precommitment and the costs of reduced ex-post wage flexibility. The cyclical characteristics of contracts in the model arguably provide an explanation for actual contractual cycles quite different from some alternative current models. The model may also be used to provide certain empirical predictions concerning the determinants of contract length.

Bohn, Henning

AB   Several recent papers on dynamically optimal taxation have derived an indeterminacy result regarding state-contingent capital taxation in stochastic models with state-contingent government liabilities. The indeterminacy arises because the government has N degrees of freedom to set tax rates on capital income in N states of nature, only subject to a single constraint that assures an optimal level of capital investment. The paper shows that this indeterminacy result is a consequence of the assumption that the economy has only a single production technology. If there are many technologies, there will be additional constraints, because differences in capital income tax rates in different states of nature will create incentives to invest in those technologies that have high payoffs in states with relatively low tax rates. If there are a large number of technologies, both the structure of capital tax rates and the structure of government debt are tied down in many dimensions.

Bolton, Patrick

AB   Within an optimal contracting framework we analyze some important aspects of debt structure: the number of

creditors a company borrows from; the allocation of security interests among creditors; and inter-creditor covenants that govern renegotiation of debt contracts. The key to our analysis is the idea that debt structure affects the outcome of debt renegotiation following a default. Debt structures that lead to inefficient renegotiation are beneficial in that they deter default, but they are also costly if default is beyond a manager's control. The optimal debt structure balances these effects. We characterize how the optimal debt structure depends on firm characteristics such as technology, credit rating and the market for its assets.

Bomfim, Antulio N.

PD February 1993. **TI** Forecast-Heterogeneity in the Business Cycle: Small Deviations from Rationality, Large Dynamic Effects. **AA** Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-2 ; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 31. **PR** no charge. **JE** E32. **KW** Strategic Complementarity. Real Business Cycles.
AB With forecast-heterogeneity and strategic complementarity, even small departures from model-consistent expectations can have important effects on the aggregate dynamics of a real business cycle model. Unlike the homogeneous-forecast framework, the present model replicates important features of the U.S. business cycle without having to resort to large and highly persistent shocks. Moreover, because agents choose to forecast the forecasts of others, the model suggests a rational for self-fulfilling expectations and near-rational behavior. The quantitative significance of the results depends positively on the degree of complementarity exhibited by the economy.

Bonanno, Giacomo

TI Synchronic Information and Common Knowledge in Extensive Games. **AU** Battigalli, Pierpaolo; Bonanno, Giacomo.

PD May 1993. **TI** Petri Nets and Input-Output Analysis. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-5; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 34. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** C67, C61. **KW** Petri Nets. Input-Output Systems.
AB The aim of this paper is to bring to the attention of economists a tool of analysis, known as Petri nets, which has been extensively studied in the computer science literature. Petri nets can have a number of interesting applications in economics. In this paper we concentrate mainly on one application: input-output analysis. However, we focus on questions that can be answered without making the two main assumptions that are commonly associated with input-output analysis, namely constant returns to scale and absence of external economies or diseconomies (furthermore, we shall always allow for joint production). To show the possibility of other applications we also discuss an example of "no-arbitrage" exchange.

PD May 1993. **TI** The Coverability Problem in Input-Output Systems. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-6; Department of Economics, University of

California at Davis, CA 95616-8578. **PG** 10. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** C67. **KW** Input-Output Analysis. Reachability.
AB The notion of vector replacement system, developed in the computer science literature, is used to analyze the reachability problem in integer-valued input-output models. An integer-valued input-output system with initial resources is a 5-tuple (n, m, A, B, u), where n is the number of commodities, m the number of production processes, A is the n x m input matrix, B is the n x m output matrix and u is the initial vector of resources. The elements of A, B and u are non-negative integers. A vector u prime is reachable from u if it is possible to transform u into u prime through a sequence of production processes, without ever violating the feasibility constraint represented by the available resources.

Boothe, Paul

PD November 1992. **TI** Stealing the Emperor's Clothes: Deficit Offloading and National Standards in Health Care. **AU** Boothe, Paul; Johnston, Barbara. **AA** Boothe: University of Alberta. Johnston: Queen's University. **SR** University of Western Ontario Papers in Political Economy: 28; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 16. **PR** no charge. **JE** H51, H72, H77. **KW** Canada. Fiscal Policy. Intergovernmental Relations.
AB Canadian provinces and the federal government have struggled to control the fiscal resources necessary to provide their programs and services to the public. There has existed a fiscal imbalance, where the federal government has controlled resources which exceed its constitutional responsibilities, while the provinces have responsibilities which exceed their resources. Recently tensions have increased as the federal government attempts to reduce its deficit. Transfers began to decline while the programs they were intended to help finance continued to grow. The provinces have charged that Ottawa was attempting to "offload" its deficit onto the provinces and was abandoning past commitments to share in the cost of national social programs. This paper has two main goals. The first is to estimate the degree of offloading, specifically in the area of health care. Our second goal is to examine the effects of offloading on the health care delivered by provinces in order to determine the whether "national standards" are indeed in jeopardy.

Border, Kim C.

PD November 1992. **TI** Dynamic Consistency Implies Approximately Expected Utility Preferences. **AU** Border, Kim C.; Segal, Uzi. **AA** California Institute of Technology. **SR** Caltech Social Science Working Paper: 821; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 13. **PR** no charge. **JE** D81, C44. **KW** Non-Expected Utility. Decision Theory.
AB Machina has proposed a definition of dynamic consistency which admits non-expected utility functionals. We show that even under this new definition, a dynamically consistent preference relation that is differentiable becomes arbitrarily close to an expected utility preference after the realization of a low probability event.

Bordo, Michael D.

AB   This paper provides answers to two questions. First, which international monetary regime is best for economic performance? One based on fixed exchange rates, including the gold standard and its variants? Adjustable peg regimes such as the Bretton Woods system and the European Monetary System? Or one based on floating exchange rates? Second, why have some monetary regimes been more successful than others? To answer the first question I examine empirical evidence on the performance of three monetary regimes: the classical gold standard; Bretton Woods; and the current float; and as a backdrop the mixed regime interwar period. I answer the second question by linking regime success to the presence of credible commitment mechanisms, that is to the incentive compatibility features of the regime. Successful fixed rate regimes, in addition to being based on simple transparent rules, contained features which encouraged a center country to enforce the rules and other countries to comply.

Borenstein, Severin

AB   In the U.S., the regulatory approach to automobile fuel choices has consisted almost exclusively of mandated changes in autos and fuel availability. This contrasts with Europe, where differential taxes and fees have been used to encourage the use of unleaded gasoline and diesel fuel. In this paper, I use data for 48 states from 1980 to 1989 to estimate the effect of price differences between leaded and unleaded gasoline on the rate at which leaded gasoline was abandoned. The estimates imply that a five cent additional tax on leaded gasoline may have caused a two-year acceleration in its phaseout and a ten cent tax may have caused leaded gasoline to virtually disappear by 1987, when it was still more than 20% of the gasoline supply.

AB   This paper models repeat-buyer programs as loyalty-inducing marketing devices in the context of multi-product firms that compete in one or many markets with similar firms. It demonstrates the conditions under which such strategies are most likely to be successful in limiting entry and increasing profits. The ability to offers "bonuses" at a marginal cost well below retail price is shown to be critical in the success of these plans. Exploitation of a principal-agent separation between the person making the purchase and the person (or corporation) paying for it is also found to greatly enhance the incentive to pursue such strategies. Finally, the network structure of demand - in contrast to simply a multi-product firm - increases the payoff from these programs. The model is then used to shed light on the success and failure of frequent-buyer marketing plans that have been used in and across industries.

Borensztein, Eduardo

AB   This paper analyzes some of the lessons that can be drawn from the experience of Eastern Europe in the process of transition to a market economy that is under way, and examines some key challenges currently facing policymakers in these economies. The paper studies the constraints affecting the general strategy of reform--rapid versus gradual--that was adopted, and the output decline initially experienced and its effect on medium-term growth perspectives. The paper also discusses the implementation of mass privatization schemes, and the type and extent of government intervention in the restructuring process.

Bos, Dieter

AB   The present policy of privatization in East Germany consists of low-price sales of industrial firms to those investors who present the best investment pledges and job guarantees. This paper argues that the extent of giving away national property could be reduced by applying a modified version of the Sinn-Sinn participation model, making the government's property trust (the "Treuhandanstalt"--THA) a silent partner of the private investors. The Akerlof proposal of a general scheme of wage subsidies has been rejected in the paper because it would lead to undesirable consequences and because the existing German system of retraining and wage-subsidy schedules seems to be preferable. Furthermore, the present paper argues that the 1991 euphoria of rapid privatization will have disappeared by end-1993, by which time the THA might have fully degenerated into a government-financed subsidization trust to keep alive nonviable firms in East Germany.

AB   This paper deals with a double inefficiency: (i) The

workforce is divided into several teams in which the employees choose their work effort according to a non-cooperative Nash equilibrium. Hence the principal faces inefficient team production in his firm. (ii) The principal is risk-averse because revenue and consumer surplus are concave in output. This drives a wedge between that choice of size and number of teams which is optimal and that which is cost-minimal. The cost inefficiency drives a wedge between expected price and marginal costs. Conditions are given under which the two inefficiencies either oppose or reinforce each other.

PD 1993. TI Privatisation in Europe: A Comparison of Approaches. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-376; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG 13. PR no charge. JE L33, L43, P11, P21. KW Principal-Agent Model. Regulation.
AB The paper compares privatization in selected European countries, namely the U.K. and West Germany from the West, and Czechoslovakia, East Germany, Hungary and Poland from Central and Eastern Europe. It argues that privatization can only be efficient if it implies divestiture. Changes in objectives, as brought about by privatization, are treated by comparing various principal-agent settings which show that it is superficial to say that privatization of monopolistic enterprises in capitalistic economies implies a move from welfare maximization to profit maximization. Finally, distributional policies are treated. It is argued that popular capitalism is a bad instrument for redistribution and that employees' shares in post-communist countries are not equitable. Distributional pricing is abolished if a privatized firm operates in a competitive market.

PD not available. TI Economics of Ageing. AA University of Bonn. SR Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-370; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG 8. PR no charge. JE J14, J11, D91, H55, D31. KW Aging. Social Security. Income Distribution.
AB The economic theory of an aging population requires the distinction of groups whose behavior differs according to age. The challenge of the economic theory of aging, therefore, is the interdependence of cross-section and life-cycle reasoning. This becomes clear in all three areas of research surveyed here. In social insurance models, individual consumer decisions determine life-cycle consumption and saving. As long as only funded pensions are at stake, with transfers between generations excluded, we are simply left with a life-cycle problem. However, the pay-as-you-go system requires the additional modeling of the cross-section interdependencies, typically in an overlapping generations framework. The theory of income distribution shows how changes in the age-group composition of the population may change the distribution of incomes, even if any individual life-cycle of income and saving remains unchanged, so that a policymaker may commit a cross-section fallacy by thinking in the usual terms of a static theory of redistribution.

Boughton, James M.
PD March 1993. TI The Demand for M1 in the United States: A Comment on Baba, Hendry, and Starr. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/93/24; International Monetary Fund, Washington, DC 20431. PG 4. PR not available. JE E41, C52. KW Money Demand. Error Correction Model.
AB A recent paper by Baba, Hendry, and Starr presents an error-correction model of the demand for M1 in the United States, which shows a dramatic improvement in both fit and stability over earlier models. This note estimates an alternative model with the same data set and draws two conclusions: that the improvements are due more to the use of complex dynamics than to the introduction of variables representing financial innovation, and that some of the economic properties are not robust with respect to minor changes in specification.

Bowman, David
PD May 1993. TI Loss Aversion in a Savings Model. AU Bowman, David; Minehart, Debby; Rabin, Matthew. AA University of California, Berkeley. SR University of California at Berkeley Working Paper in Economics: 93-212; IBER, 156 Barrows Hall, University of California, Berkeley, CA 94720. PG 25. PR $3.50 U.S.A. and Canada. $7.00 foreign. JE D11, D81, C91, E21, A12. KW Risk Behavior. Psychology. Reference Points.
AB Psychological evidence indicates that a person's well-being depends not only on his current consumption of goods, but on a reference level determined by his past consumption. According to Kahneman and Tversky's (1979) prospect theory, people care much more about losses relative to their reference points than about gains, are risk-averse over gains, and risk-loving over losses. We define these characteristics as loss aversion. We incorporate an extended form of loss aversion into a simple two-period savings model. Our main conclusion is that, when there is sufficient income uncertainty, a person resists lowering consumption in response to news about future income, and this resistance is greater than the resistance to increasing consumption in response to good news. We discuss some recent empirical research that confirms this predicted asymmetry in behavior, which seems inconsistent with other models of consumption.

Bradley, Ralph
PD June 1992. TI Nonparametric Regression Using Instrumental Variables. AA Bureau of Labor Statistics. SR Bureau of Labor Statistics Working Paper: 230; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. PG 30. PR no charge. JE C13, C14, C32. KW Kernel Estimation. Asymptotic Normality.
AB The kernel regression estimator is robust to specification error. However, the restriction that the conditional expectation of the residual be zero throughout the entire domain is often violated. This can lead to inconsistent estimates of the functional form of the underlying data generating process. In this paper we propose to correct for this violation through a limited information two stage kernel regression. We establish the consistency and asymptotic normality of this estimator. The researcher should be able to use these asymptotic results in the initial stages of model building in order to better determine those specifications that are congruent with the statistical properties of the data.

Bredenkamp, Hugh
PD March 1993. TI Conducting Monetary and Credit

Policy in Countries of the Former Soviet Union: Some Issues and Options. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/23; International Monetary Fund, Washington, DC 20431. **PG** 22. **PR** not available. **JE** E51, E52, E31. **KW** Inflation. Economic Transition. Credit.

AB This paper surveys some of the principal monetary policy issues facing countries of the former U.S.S.R. The emphasis is on the immediate problem of imposing financial discipline in these economies, to bring down inflation quickly and decisively. Possible options for the essential nominal anchor are considered, together with the problems of selecting appropriate targets and instruments for monetary policy needed to make that anchor effective. It is argued that, if the stabilization effort is to be sustained, discipline must be imposed at the micro- as well as the macro-level, and the paper suggests a second-best approach to the allocation of credit in the absence of well-functioning credit markets.

Broome, John R.

PD April 1993. **TI** Goodness is Reducible to Betterness: The Evil of Death is the Value of Life. **AA** University of Bristol. **SR** University of Bristol Economics Working Paper: 93/351; Department of Economics, University of Bristol, Alfred Marshall Building, 8 Woodland Road, Bristol BS8 1TN, ENGLAND. **PG** 12. **PR** no charge. **JE** Z00, J17, A13. **KW** Philosophy. Comparatives.

AB Let us say a property is reducible to its comparative if any statement that refers to the property has the same meaning as another statement that refers to the comparative instead. A property is not reducible to its comparative if it has absolute degrees, and specifically an absolute zero. The property of goodness is reducible to its comparative, betterness. In particular, there is not absolute zero of goodness. Things are ordered by betterness - some things are better than others - but nothing is absolutely good or absolutely bad. The goodness of lives has a different sort of absolute zero. Lives are ordered by betterness; some lives are better than others. We can make sense of the question "Where in this ordering is the division between lives that are good and those that are bad?" The division between good and bad lives is again reducible to betterness. To say a person's life is good means it is better that the person should continue living, rather than that it should never have been lived at all.

Broze, Laurence

PD March 1993. **TI** Covariance Estimators and Adjusted Pseudo Maximum Likelihood Method. **AU** Broze, Laurence; Gourieroux, Christian. **AA** Broze: Universite Catholique de Louvain and Universite de Lille 3. Gourieroux: CREST and CEPREMAP. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9313; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 23. **PR** not available. **JE** C13. **KW** Maximum Likelihood Estimation. Decomposable Models.

AB In this paper, we introduce the concept of covariance estimators. These estimators are obtained by solving the empirical counterpart of some noncorrelation conditions characterizing the interest parameters. The statistical properties of the covariance estimators are studied in a general framework and a special attention is given to a large class of decomposable models. In a second step, we introduce the concept of adjusted

pseudo maximum likelihood estimators. These estimators are the solutions of centered pseudo maximum likelihood equations. Then, we give the simplified form of the asymptotic covariance matrix of the covariance estimators of the adjusted PML approach for decomposable models. As a by-product it is proved that misspecified pseudo-maximum likelihood methods lead to consistent estimators of the coefficients of the explanatory variables as soon as some auxiliary translation and scale parameters have been introduced in the model.

Bryan, Michael F.

PD March 1993. **TI** Measuring Core Inflation. **AU** Bryan, Michael F.; Cecchetti, Stephen G. **AA** Bryan: Federal Reserve Bank of Cleveland. Cecchetti: Ohio State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4303; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** $5.00. **JE** C43, E31, C82. **KW** Price Index. Limited Information Estimators.

AB In this paper, we investigate the use of limited-information estimators as measures of core inflation. Employing a model of asymmetric supply disturbances, with costly price adjustment, we show how the observed skewness in the cross-sectional distribution of inflation can cause substantial noise in the aggregate price index at high frequencies. The model suggests that limited-influence estimators, such as the median of the cross-sectional distribution of inflation, will provide superior short-run measures of core inflation. We document that our estimates of inflation have a higher correlation with past money growth and deliver improved forecasts of future inflation relative to the CPI. Moreover, unlike the CPI, the limited-influence estimators do not forecast future money growth, suggesting that monetary policy has often accommodated supply shocks that we measure as the difference between core inflation and the CPI.

Buehler, Guy

PD April 1993. **TI** Les Effets de la Dereglementation du Prix de l'Essence. **AU** Buehler, Guy; Lambelet, Jean-Christian. **AA** Universite de Lausanne. **SR** Universite de Lausanne, Cahiers de Recherches Economiques: 9304; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. **PG** 9. **PR** no charge. **JE** Q48, L51, D43, D21. **KW** Deregulation. Gasoline.

AB The effects of the deregulation of gasoline prices are discussed. The paper is written in French.

PD April 1993. **TI** Augmentation de la Taxe sur l'Essence: Assainissement de l'Environnement et/ou des Finances Federales? **AA** Universite de Lausanne. **SR** Universite de Lausanne, Cahiers de Recherches Economiques: 9305; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. **PG** 18. **PR** no charge. **JE** Q41, Q48. **KW** Gasoline Tax. Environment.

AB Not available. The paper is written in French.

Bufman, Gil

PD March 1993. **TI** Israel's Stabilization: Some Important Policy Lessons. **AU** Bufman, Gil; Leiderman, Leonardo. **AA** Bufman: The Bank of Israel. Leiderman: Tel-

Aviv University. **SR** Tel Aviv Sackler Institute of Economic Studies Working Paper: 4/93; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 28. **PR** no charge. **JE** E31, E65, E63, F31, H54. **KW** Deflation. Infrastructure Investment. Exchange Rate Bands.

AB This paper reexamines Israel's disinflation after 1985 in an attempt to draw lessons for stabilization policies in the future. We argue that part of of the slow transition from stabilization to growth could be explained by the lack of government policies aimed at increasing public investments in infrastructures. In addition, Israel's exchange rate band from 1989 to 1991 lacked credibility because it maintained a fixed central parity rate while at the same time domestic inflation continued to exceed world inflation. The shift to a crawling band in 1992 played an important role in restoring at least part of the policy's credibility.

Buiter, Willem H.

PD November 1992. **TI** Excessive Deficits: Sense and Nonsense in the Treaty of Maastricht. **AU** Buiter, Willem H.; Corsetti, Giancarlo; Roubini, Nouriel. **AA** Buiter and Roubini: Yale University. Corsetti: Universita di Roma III. **SR** Yale Economic Growth Center Discussion Paper: 674; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven, CT 06520. **PG** 87. **PR** $2.00. **JE** F15, F33, E62, F36. **KW** European Monetary Union. Fiscal Policy. Fiscal Rules.

AB In this paper we present an evaluation of internationally agreed limits on public sector debt and deficits such as those agreed by the EC countries in the Treaty of Maastricht as preconditions for membership in a monetary union. The Maastricht requirements, especially the debt criterion, are much more stringent than those required to ensure public sector solvency. Their implementation would require an excessive degree of fiscal economic activity. The deficit guideline does not appear to be sensible, since the numerical criterion refers to the nominal interest payments-inclusive financial deficit, with no corrections for inflation and real output growth, no cyclical adjustment and no appropriate allowance for future revenue producing public sector investment. We discuss the various "externality" arguments in favor of binding fiscal rules and find them wanting both theoretically and empirically. We conclude that the fiscal convergence criteria should be disregarded or applied quite loosely in order to avoid the risk of serious fiscal overkill.

Burda, Michael

PD August 1992. **TI** The Determinants of East-West German Migration: Some First Results. **AA** INSEAD, Wissenschaftszentrum Berlin and Centre for Economic Policy Research. **SR** INSEAD Working Papers: 92/70/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 8. **PR** not available. **JE** O15, J61, C25. **KW** Migration. Logit Analysis.

AB The determinants of migration propensities of East Germans in the German Socioeconomic Panel are investigated. The option value of waiting is proposed to capture important aspects of the migration decision. Logit analysis of migration intentions reveals that age, rents, friends and relatives in the West, and urban characteristics weigh significantly in the migration calculus. Levels and growth rates of nominal wages have little explanatory power. Some policy implications of these preliminary results are discussed.

PD September 1992. **TI** Unemployment, Labor Market Institutions and Structural Change in Eastern Europe. **AA** INSEAD, Wissenschaftszentrum Berlin and Centre for Economic Policy Research. **SR** INSEAD Working Papers: 92/68/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 31. **PR** not available. **JE** E24, P27, J20. **KW** Economic Transition. Labor Markets.

AB The "flow approach" to labor markets suggests that unemployment is an important complement to the transformation of Eastern Europe and that institutions will help determine the long run rate of unemployment in these economies. Considerable institutional variation across countries is observed, especially with respect to unemployment benefits. Multiple equilibria may arise from many sources, including interaction of fiscal policy with the labor market. An aggregate matching function is successfully estimated with monthly gross flows data with Czech and Slovak employment districts. The conclusion of a control-theoretic analysis supports a "mixed bang"; that is, neither big-bang nor benign neglect is optimal.

PD October 1992. **TI** Decentralized Trade as a Market Imperfection: The Case of the Labor Market. **AA** INSEAD, Wissenschaftszentrum Berlin and Centre for Economic Policy Research. **SR** INSEAD Working Papers: 92/69/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 24. **PR** not available. **JE** J41, J64. **KW** Unemployment. Matching Model.

AB Some of the most important merits of the flow or matching approach to modeling labor markets are examined. Besides clarifying the distinction between voluntary and involuntary unemployment, this approach explains the importance of labor market institutions in determining the equilibrium rate. Two examples of multiple equilibria which are not related to returns to scale in the matching function are proposed. The optimality of decentralized wage setting is reviewed. Finally the model is used in deriving the optimal rate of layoff in a transformation from a planned to a market economy.

Burdett, Kenneth

PD February 1993. **TI** Buyers and Sellers. **AU** Burdett, Kenneth; Coles, Melvyn; Kiyotaki, Nobuhiro; Wright, Randall. **AA** Burdett and Coles: University of Essex. Melvyn: Federal Reserve Bank of Minneapolis and University of Minnesota. Wright: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 93-03; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 23. **PR** no charge. **JE** D51, D83. **KW** Search. Exchange Economy. Trading Partners.

AB What determines which agents in the economy are willing to invest resources in the process of active search for trading partners, and which prefer to passively wait for trading partners to come to them? Given groups of buyers with money and sellers with goods, what explains the typical outcome, that buyers search for sellers rather than the other way around? Can this also explain the prevalence of monetary exchange over barter? We study these issues in a search-theoretic monetary

model. The set of equilibria in pure and mixed strategies is characterized. There exist equilibria where buyers search for sellers even if money has a greater transportation cost than goods; but there can also exist other (and sometimes multiple) equilibria. Welfare implications are discussed.

Burfisher, Mary E.

PD March 1993. **TI** Wage Changes in a U.S.-Mexico Free Trade Area: Migration Versus Stolper-Samuelson Effects. **AU** Burfisher, Mary E.; Robinson, Sherman; Thierfelder, Karen E. **AA** Burfisher: U.S. Department of Agriculture. Robinson: University of California, Berkeley. Thierfelder: U.S. Naval Academy. **SR** University of California at Berkeley Department of Agricultural and Resource Economics Working Paper: 645; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 25. **PR** $7.50. **JE** F13, F14, F22, C68. **KW** NAFTA. Trade Liberalization. Labor Migration.

AB In this paper, we examine wage changes that can accompany trade liberalization between the United States and Mexico under a North American Free Trade Agreement (NAFTA). There are two forces at work: (1) indirect links between prices and wages as described in the Stolper-Samuelson theorem, and (2) direct effects of migration on labor supplies in the two countries. Much of the debate over potential wage changes reflects views about the links between output prices and factor prices as described in the Stolper-Samuelson theorem. We demonstrate that the analytic model underlying the Stolper-Samuelson theorem does not fully describe labor market changes that will accompany NAFTA because it assumes that factors do not migrate. We extend the 2x2x2 trade model to include endowment changes and demonstrate that price changes and migration can have opposite effects on wages. Using an 11-sector computable general equilibrium model which includes the United States, Mexico, and the rest of the world, we find that migration effects generally dominate Stolper-Samuelson effects on wages.

Burgess, Simon M.

PD April 1993. **TI** Where Did Europe Fail? A Disaggregate Comparison of Net Job Generation in the USA and Europe. **AA** University of Bristol. **SR** University of Bristol Economics Working Paper: 93/352; Department of Economics, University of Bristol, Alfred Marshall Building, 8 Woodland Road, Bristol BS8 1TN, ENGLAND. **PG** 11. **PR** no charge. **JE** J61, O57, J23, J62, E24. **KW** Employment. Flexibility.

AB One outstanding macroeconomic feature of the past twenty years is the divergent employment growth of the USA and Europe. This paper investigates this, highlighting the nature of the differences and focusing on the flexibility of labor markets and the capability of an economy to reallocate labor. The main results are (i) there is weak evidence that the U.S. is better at reallocating jobs than Europe, (ii) investigating the cycle, the main contrast between U.S. industries and the European industries is in the upswing, (iii) employment growth experience in a typical U.S. industry is more diverse than in the European counterpart.

PD May 1993. **TI** The Reallocation of Employment and the Role of Employment Protection Legislation. **AA** University of Bristol. **SR** University of Bristol Economics Working Paper: 93/353; Department of Economics,

University of Bristol, Alfred Marshall Building, 8 Woodland Road, Bristol BS8 1TN, ENGLAND. **PG** 31. **PR** no charge. **JE** J62, J61, J68, J20. **KW** Labor Reallocation. Public Policy.

AB Policy affects the ability of markets to reallocate factors. This paper addresses two questions: first, is there any evidence that the tightness of a country's Employment Protection Legislation (EPL) affects the speed with which labor is reallocated? Second, do differences in reallocation speed matter for a country's welfare? The results provide some support for the idea of a link between EPL and the speed of labor reallocation. On the second question, the qualitative answer is clear: slow reallocation of labor means lower aggregate productivity growth; a simple model suggests that the magnitude of this effect may be significant.

Bustamante, Rene

TI Fight, Fold or Settle?: Modeling the Reaction to FTC Merger Challenges. **AU** Coate, Malcolm B.; Kleitt, Andrew N.; Bustamante, Rene.

Cadot, Olivier

PD November 1992. **TI** Bail-Outs That are Truly "Involuntary." **AA** INSEAD. **SR** INSEAD Working Papers: 93/13/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 22. **PR** not available. **JE** G21, G33, D82. **KW** Debt Crisis. Asymmetric Equilibrium. Pooling Equilibrium.

AB The paper considers the issue of bail-out lending to sovereign debtors when some lenders have more information than others. It is shown that in a pooling equilibrium, uninformed but strategically-thinking lenders with no prior exposure can be induced to participate in syndicates whose role will be to refinance troubled debtors. This will be possible when the uninformed lenders are optimistic enough about the overall state of the market. When their priors on the market deteriorate, a sudden shift can be triggered to a separating equilibrium; such a shift is called a "debt crisis". The new equilibrium is characterized by a higher concentration of lending among large banks, at a lower overall level.

Cahuc, P.

PD March 1993. **TI** Voice and Loyalty as a Delegation of Authority: A Model and a Test on a Panel of French Firms. **AU** Cahuc, P.; Kramarz, F. **AA** Cahuc: Universite de Paris I. Kramarz: INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9316; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 31. **PR** no charge. **JE** J53, J54, L14. **KW** Worker Collective. Labor-Management Relations.

AB In this article, we exhibit a mechanism that makes delegation of authority from a firm to a collective of workers profitable. This power is exchanged against loyalty. The model is tested on a panel of French firms for which we know whether an accord d'entreprise (firm agreement) has been signed or not. We show both theoretically and empirically that the voluntary signature of a collective agreement induces manpower stabilization.

Caillaud, B.

TI Competing Vertical Structures: Precommitment and Renegotiation. **AU** Jullien, B.; Caillaud, B.; Picard, P.

Calvo, Guillermo A.

AB Exchange rate-based stabilizations often result in an initial output expansion. One explanation for this phenomenon has been that, in the presence of inflation inertia, a reduction in the nominal interest rate caused the domestic real interest rate to fall, thus increasing aggregate demand. This paper reexamines this issue in the context of an intertemporal optimizing model. In contrast to previous results, the analysis shows that, if the intertemporal elasticity of substitution is smaller than the elasticity of substitution between traded and home goods, a permanent reduction in the rate of devaluation leads to a fall in aggregate demand.

Cameron, Stephen V.

AB This paper examines the determinants of GED acquisition, high school graduation and postsecondary training and schooling choices. Economic factors determining dropping out are considered. The determinants of high school certification by exam are fundamentally different from the determinants of ordinary high school graduation. GED graduates are more likely to take vocational and technical training while ordinary graduates are more likely to attend academic programs. GED recipients are much less likely to complete the post-secondary programs they begin. The GED exam does not measure the ability or motivation that predicts successful completion of post-secondary schooling and training programs. Participation in post-secondary nonacademic training is positively related to family resources. Thus both academic and non-academic training operate to reinforce initial family earnings inequalities.

Campa, Jose

AB This paper studies the linkages between exchange rates and investment, emphasizing the role of producer exposure through export sales and through imported inputs into production. For two-digit United States manufacturing sectors we present time series of export shares and imported input shares. On average, manufacturing sectors have evolved from being primarily export exposed in the 1970's to being primarily import exposed by the early 1980's. Due to this pattern in exposure, exchange rate appreciations reduced investment in durable goods sectors in the 1970's and stimulated investment after 1983. By contrast nondurables sectors tended to absorb exchange rate changes in price over cost markups. Exchange rate volatility depressed investment but the effects were quantitatively small.

Campbell, John Y.

AB This paper breaks assets' betas with common factors into components attributable to news about future cash flows, real interest rates, and excess returns. To achieve this decomposition the paper uses a vector autoregressive time-series model and an approximate log-linear present value relation. The betas of industry and size portfolios with the market are largely attributed to changing expected returns. Betas with inflation and industrial production reflect opposing cash flow and expected return effects. The paper also shows how asset pricing theory restricts the expected excess return components of betas.

Carlino, Gerald

AB This paper uses time-series techniques to explore interregional links in real per capita income. The study examines annual data for the period 1929 to 1990 for the eight Bureau of Economic Analysis (BEA) regions. Impulse response functions and variance decompositions from an estimated structural vector autoregression reveal that important and persistent interregional spillovers exist. Moreover, these spillovers tend to be geographically dispersed.

Carrington, William

AB Job displacement entails a substantial wage reduction for most displaced workers. We show that the mean reduction, the tenure profile of reductions, and the experience profile of

reductions all vary substantially across industries. We then link this interindustry variation to analogous variation in firm size, unionization, wage levels, and the incidence of employer-provided training. While these industry characteristics explain some of the interindustry variation in mean wage reductions, they do not explain variation in the tenure or experience profiles of wage reductions.

Cases, C.
PD   March 1993. TI   Estimation de la Duree du Chomage en France en 1986. AU   Cases, C.; Lollivier, S. AA   INSEE. SR   Unite   de   Recherche   Document   de   Travail ENSAE/INSEE: 9309; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG   18. PR   no charge.   JE   C41, J64.   KW   Unemployment. Duration Analysis.
AB   In France, it is difficult to compute unemployment durations because of the use of stock sampled data. In the study, we estimate a reduced form of job search model using different specifications of the hazard function. The estimation of expected durations depends on the specification of the hazard function: eight to nine months for men, eleven to thirteen months for women. The individual situations are very heterogeneous, as shown by the introduction of exogeneous variables such as age or unemployment benefits. Taking correctly into account stock sampling is required. Without it, estimated results cannot be interpreted.

Cecchetti, Stephen G.
TI   Measuring Core Inflation. AU   Bryan, Michael F.; Cecchetti, Stephen G.

Chadha, Bankim
PD   March   1993.   TI   Economic   Restructuring, Unemployment, and Growth in a Transition Economy. AU   Chadha, Bankim; Coricelli, Fabrizio; Krajnyak, Kornelia. AA   Chadha: International Monetary Fund. Coricelli: World Bank. Krajnyak: Massachusetts Institute of Technology. SR   International Monetary Fund Working Paper: WP/93/16; International Monetary Fund, Washington, DC 20431. PG   28. PR   not available. JE   E24, J62, J24, P27. KW   Economic Transition. Human Capital.
AB   This paper develops a model of the process of reallocation of labor from the state sector to the private sector. When growth is exogenously determined, we show that in the initial stages of transition unemployment will rise over time. After a critical stage in the transition process, restructuring is accompanied by a decline in unemployment. When growth is endogenously determined, and human capital is acquired by learning-by-doing, we show that whether restructuring eventually occurs is determined by the level of human capital in the private sector and the rate of unemployment. The effects of various shocks and government policies in affecting the costs, speed, and eventual outcome of restructuring are analyzed.

Chakrabarti, Subir
PD   May 1993. TI   Stationary Equilibrium Strategies in Stochastic Games. AA   Johns Hopkins University and IUPUI. SR   Johns Hopkins Department of Economics Working Paper: 309; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. PG   14. PR   no charge. JE   C73, C62.   KW   Markov   Strategies.   Transition Probabilities.
AB   In this paper we discuss the existence of Markov, Perfect Equilibrium Strategies for stochastic games. Among the major assumptions are that the stochastic games have a state space which is a complete, separable metric space and transition probabilities that are Markovian and continuous in the weak topology on the space of probability measures. The action spaces are compact metric spaces and the payoff functions are continuous and uniformly bounded. This, therefore, expands on the earlier work of Parthasarathy and Sinha in which the result is shown to be true when the action spaces are finite and the transition probabilities are state independent.

Chang, Valerie J.
PD   May 1993. TI   Industry Restructuring and Export Performance: Evidence on the Transition in Hungary. AU   Chang, Valerie J.; Mann, Catherine L. AA   Board of Governors of the Federal Reserve System. SR   Board of Governors of the Federal Reserve System International Finance Discussion Paper: 445; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. PG   21.   PR   no charge. JE   P12, L11, F14, P27. KW   Economic Transition. Exports.
AB   Robust and numerous small and medium-size enterprises (SME's) are a hallmark of the market economy and development of these firms is an integral part of the structural transformation of the economies of East-Central Europe (ECE). Data for Hungary on changes in the size distribution of firms and their importance for output and employment indicates that industry restructuring is taking place. One measure of the success of restructuring is export performance. That is, increased exports by those industries undergoing restructuring suggests that the process is creating firms that are successfully responding to market demand and international price signals. Disaggregated industry data from Hungary support the propositions that restructured industries and industries that have historically been important for domestic and export markets have become more important exporters. Moreover, it appears that Hungarian exporters have been effectively exploiting the switch from the CMEA market and the opening up of the border with the European Community.

Chen, Celia
TI   Testing Structural Stability with Endogenous Break Point: A Size Comparison of Analytic and Bootstrap Procedures. AU   Diebold, Francis X.; Chen, Celia.

Cheung, Yin-Wong
PD   February   1993.   TI   On   Maximum-Likelihood Estimation of the Differencing Parameter of Fractional Integrated Noise with Unknown Mean. AU   Cheung, Yin-Wong; Diebold, Francis X. AA   Cheung: University of California, Santa Cruz. Diebold: University of Pennsylvania. SR   Federal Reserve Bank of Philadelphia Research Working Paper: 93-5; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG   15. PR   no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE   C13, C22. KW   Fractional Integration.
AB   There are two approaches to maximum-likelihood (ML) estimation of the parameter of fractionally integrated noise: approximate frequency-domain ML (Fox and Taqqu, 1986) and

exact time-domain ML (Sowell, 1992a). If the mean of the process is known, then a clear finite-sample mean-squared error ranking of the estimators emerges: the exact time-domain estimator is superior. We show that the finite-sample efficiency of approximate frequency-domain ML relative to exact time-domain ML rises dramatically when the mean is unknown and so must be estimated. The frequency domain ML estimator is invariant to the true but unknown mean of the process, while the time-domain ML estimator is not. Feasible time-domain estimation must therefore be based upon de-meaned data, but the long memory associated with fractional integration makes precise estimation of the mean difficult. We conclude that the frequency-domain estimator is an attractive and efficient alternative for situations in which large samples sizes render time-domain estimation impractical.

Chirinko, Robert S.
PD February 1993. TI Business Fixed Investment Spending: A Critical Survey of Modeling Strategies, Empirical Results, and Policy Implications. AA Federal Reserve Bank of Kansas City. SR Federal Reserve Bank of Kansas City Research Working Paper: 93-01; Research Division, Federal Reserve Bank of Kansas City, 925 Grand Ave., Kansas City, MO 64198. PG 78. PR no charge. JE E22, B41, C50. KW Econometric Models. Lucas Critique. Research Agenda.
AB *This study offers a critical review of the literature on business fixed investment spending, and assesses the current state of knowledge, the implications for public policy, and the agenda for future research. To place some structure on this vast literature, the monograph is organized according to two principles. The first focuses on the four key issues that have been faced repeatedly by investment researchers. The second organizing principle sorts models by whether dynamics are introduced into the econometric equation implicitly or explicitly. The important critique advanced by Robet Lucas is discussed, and serves as a transition between this historical review and some of the important topics on the research agenda. The widening gap between those who develop and test econometric models and those who actively use them in policy and business applications is also examined.*

PD March 1993. TI Bubbles, Fundamentals, and Investment: A Multiple Equation Testing Strategy. AU Chirinko, Robert S.; Schaller, Huntley. AA Chirinko: Federal Reserve Bank of Kansas City. Schaller: Carleton University. SR Federal Reserve Bank of Kansas City Research Working Paper: 93-03; Research Division, Federal Reserve Bank of Kansas City, 925 Grand Ave., Kansas City, MO 64198. PG 31. PR no charge. JE E22, G12, G32. KW Stock Market. Investment Spending.
AB Dramatic fluctuations in the stock market raise questions about whether actual asset prices correspond to fundamentals and whether bubbles can affect real investment spending. Even if there are bubbles, they may not distort real behavior if firms base investment decisions on fundamentals. On the other hand, overvaluation of equities could provide firms with a relatively cheap source of finance and might therefore influence investment. To evaluate these issues, the paper introduces a new econometric testing strategy, and assesses the existence of stock market bubbles and the sensitivity of investment spending by industrial firms to stock market bubbles through an equity financing mechanism or other channels. We estimate the Q and Euler equations in a simultaneous equations model, and exploit the idea that these equations reflect different information about

the stock market and investment spending. Based on U.S. data for 1911-1987, our formal statistical tests indicate that bubbles exist but real investment decisions are based on fundamentals.

Cho, Dongchul
TI A Utility Based Comparison of Some Models of Exchange Rate Volatility. AU West, Ken D.; Edison, Hali; Cho, Dongchul.

Choe, Minja Kim
TI Leaving Parental Home: Census-Based Estimates for China, Japan, South Korea, United States, France and Sweden. AU Zeng, Yi; Coale, Ansley; Choe, Minja Kim; Liang, Zhiwu; Liu, Li.

Church, Jeffrey
PD March 1993. TI Equilibrium Foreclosure and Complementary Products. AU Church, Jeffrey; Gandal, Neil. AA Church: University of Calgary. Gandal: Tel-Aviv University. SR Tel Aviv Sackler Institute of Economic Studies Working Paper: 3/93; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. PG 23. PR no charge. JE L41, L63. KW Monopolization. Horizontal Integration.
AB In this paper we address the possibility of horizontal foreclosure in markets for complementary services (software) where the consumption value of durables (hardware) depends on the availability of software. Horizontal foreclosure occurs when a hardware firm merges with a software firm and the integrated firm ceases to supply compatible software for a rival technology. We find that horizontal foreclosure can be an equilibrium outcome where both the merger and compatibility decisions are part of a multistage game which permits the foreclosed firm to play a number of counter-strategies. Moreover, foreclosure may results in monopolization of the hardware market. We find that the foreclosure equilibrium is inefficient: total surplus would be higher without foreclosure.

Ciccone, Antonio
PD April 1993. TI Productivity and the Density of Economic Activity. AU Ciccone, Antonio; Hall, Robert E. AA Ciccone: Stanford University. Hall: Stanford University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4313; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 34. PR $5.00. JE R14, R32. KW Agglomeration. Employment Density. Local Externalities.
AB Two different models - one based on local geographical externalities and the other on the variety of only locally available intermediate services - are shown to give rise to a simple, estimable relation between employment density and productivity. Using data on gross state output for the U.S., we find that agglomeration more than offsets congestion effects in denser areas. While our estimate of the elasticity of productivity with respect to density is small, it explains more than 50% of the observed state productivity differences, given the large differences in density.

Clement, E.
PD February 1993. TI Modeles Statistiques de Valorisation par Arbitrage. AU Clement, E.; Gourieroux, Christian; Monfort, A. AA INSEE. SR Unite de

Recherche Document de Travail ENSAE/INSEE: 9314; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 22. **PR** no charge. **JE** G13. **KW** Contingent Prices. Arbitrage Pricing.
AB We focus on the notion of elementary contingent prices, which is the basis for arbitrage pricing. We discuss the properties of these prices when we change either the time unit, or the state space, or the numeraire. Finally we explain how these prices may be used in building statistical models for pricing.

Coale, Ansley
TI Leaving Parental Home: Census-Based Estimates for China, Japan, South Korea, United States, France and Sweden. **AU** Zeng, Yi; Coale, Ansley; Choe, Minja Kim; Liang, Zhiwu; Liu, Li.

Coate, Malcolm B.
PD February 1993. **TI** Fight, Fold or Settle?: Modeling the Reaction to FTC Merger Challenges. **AU** Coate, Malcolm B.; Kleitt, Andrew N.; Bustamante, Rene. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 200; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 29. **PR** no charge. **JE** K21, K41, L41. **KW** Federal Trade Commission. Litigation. Antitrust Policy.
AB This paper models the reaction of firms to Federal Trade Commission (FTC) decisions to seek to block proposed horizontal mergers. Firms' responses to the FTC are shown to depend on a number of factors, including the structural merits of the FTC challenge, the efficiencies potentially arising from the transaction, and the cost to the firms of fighting the FTC in court. For a large number of the FTC's merger challenges, we find that firms have strong incentives to settle with the Commission, regardless of the cases' competitive merits. Therefore, in these matters the Commission appears to have powers more like a regulatory agency than a prosecutor.

Codognato, Giulio
PD January 1993. **TI** Cournot-Walras and Cournot Equilibria in Mixed Markets: A Comparison. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9301; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 9. **PR** not available. **JE** D51, D43. **KW** Exchange Economy. Oligopoly.
AB In this paper, we show that, in markets with a continuum of traders and atoms, the set of Cournot-Walras equilibria does not coincide with the set of Cournot equilibria. We show also that, when the preferences of the traders are represented by Cobb-Douglas utility functions, the set of Cournot-Walras equilibria and the set of Cournot equilibria have a nonempty intersection.

Coleman, William D.
PD December 1992. **TI** Weathering the Storm: Associational Governance in a Globalizing Era. **AA** McMaster University. **SR** University of Western Ontario Papers in Political Economy: 25; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 27. **PR** no charge. **JE** L51, L52, F40. **KW** Interest Associations.
AB This paper examines the governance roles of interest associations in three steps. First, the concept of associational governance is analyzed conceptually by reflecting briefly on the likely effects of economic globalization on the organizational development of associations. Second, the paper assesses the impact of internationalization on associational governance at the national level. Two scenarios are studied: sectors in decline and sectors at a maturation stage. Finally, the paper reviews the prospects for associational governance at a supra-national level. It argues that, at present, such developments remain highly unlikely, but that supra-national governing arrangements among states may lead to an increase in the governing powers of national-level interest associations.

Coles, Melvyn
TI Buyers and Sellers. **AU** Burdett, Kenneth; Coles, Melvyn; Kiyotaki, Nobuhiro; Wright, Randall.

Comment, Robert
PD April 1993. **TI** Poison or Placebo? Evidence on the Deterrent and Wealth Effects of Modern Antitakeover Measures. **AU** Comment, Robert; Schwert, G. William. **AA** Comment: University of Rochester. Schwert: University of Rochester and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4316; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 37. **PR** $5.00. **JE** G34. **KW** Poison Pill. Takeovers. Corporate Control.
AB This paper provides large-sample evidence that poison pill rights issues, control share statutes, and business combination statutes do not deter takeovers and are unlikely to have caused the demise of the 1980's market for corporate control, even though 87% of all exchange-listed firms are now covered by one or another of these antitakeover measures. We show that poison pills and control share statutes are reliably associated with higher takeover premiums for selling shareholders, both unconditionally and conditional on a successful takeover, and we provide updated event-study evidence for the three-quarters of all poison pills not yet analyzed.

Constantinides, George M.
PD August 1992. **TI** Asset Pricing with Heterogeneous Consumers. **AU** Constantinides, George M.; Duffie, Darrell. **AA** Constantinides: University of Chicago. Duffie: Stanford University. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-381; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 19. **PR** no charge. **JE** D11, G12. **KW** Euler Equations. Exchange Economy.
AB Empirical difficulties encountered by representative-consumer models are resolved in an economy with heterogeneity in the form of uninsurable, persistent, and heteroskedastic labor income shocks. Given the joint process of arbitrage-free asset prices, dividends, and aggregate income, satisfying a certain joint restriction, it is shown that these processes are supported in the equilibrium of an economy with judiciously modeled income heterogeneity. This restriction implies that the Euler equations of per-capita consumption are replaced by Euler inequalities of per capita-consumption. To the extent that these inequalities have been tested so far, they

have not been rejected with risk aversion coefficients as low as one.

Corbett, Charles
TI Trade-Offs? What Trade-Offs? (Competence and Competitiveness in Manufacturing Strategy). AU Van Wassenhove, Luk; Corbett, Charles.

Cordella, Tito
PD August 1992. TI Patterns of Trade and Oligopoly Equilibria: An Example. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9251; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 9. PR not available. JE F12, D43. KW International Trade. Oligopoly.
AB In this paper we investigate, via an example, the effects of oligopolistic competition in a two countries two goods "Ricardian" model of international trade. By contrast with results that apply to the competitive free trade equilibrium, at the oligopoly equilibrium industries with different technologies can profitably survive. Moreover, we show that, in an oligopolistic setting, the pattern of trade cannot be inferred either by pre-trade prices, or by the comparative advantage principle.

PD September 1992. TI A Note on Redistributions and Gains from Trade. AU Cordella, Tito; Ventura, Luigi. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9253; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 6. PR not available. JE F14, H23. KW Taxation. Transfers. International Trade.
AB It is a well known result that through national lump sum taxes and transfers everybody can gain from international trade. This is always the case when domestic lump sum tax and transfers are implemented before trade. This brief note points out that if domestic transfers are possible only after trade it may well happen that some agents' losses can no longer be compensated. This simple reasoning helps make the case for supra-national political and economic institutions.

PD January 1993. TI Comparative Advantage Under Oligopoly. AU Cordella, Tito; Gabszewicz, Jean J. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9307; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 16. PR not available. JE F12, D43. KW International Trade. Specialization.
AB We analyze the principle of comparative advantage when agents in the world market are aware of the influence their individual supply exerts on the equilibrium exchange rate of goods. We show that specialization following comparative disadvantage can be an oligopoly equilibrium in a Ricardian economy. Moreover, for a wide class of economies, it is the only one. Nonetheless, when the number of agents in each country increases without limit, the equilibrium in which specialization follows comparative advantage again obtains.

Coricelli, Fabrizio
TI Economic Restructuring, Unemployment, and Growth in a Transition Economy. AU Chadha, Bankim; Coricelli, Fabrizio; Krajnyak, Kornelia.

Corsetti, Giancarlo
TI Excessive Deficits: Sense and Nonsense in the Treaty of Maastricht. AU Buiter, Willem H.; Corsetti, Giancarlo; Roubini, Nouriel.

PD December 1992. TI A Portfolio Approach to Endogenous Growth: Eaton's Model Revisited. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 678; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven CT 06520. PG 29. PR $2.00. JE O41, G11, H21, E62. KW Asset Pricing. Risk. Fiscal Policy.
AB A few years before the development of endogenous growth theory, Eaton's article in the Review of Economic Studies provided a suitable framework of analysis to study policy-related issues in stochastic endogenous growth model. In this paper, we highlight the analytical core of the model, completing the original discussion and showing directions for possible extensions and generalizations. The main advantage of a portfolio approach to growth and policy analysis consists of pointing out the equilibrium relations between fiscal policy, rates of return and portfolio composition. The financial counterpoint of alternative fiscal policies highlighted by Eaton's model thus makes us aware of additional degrees of freedom in fiscal and financial engineering, which logically complement the traditional analysis of intertemporal optimal taxation.

PD December 1992. TI Taxation and Risk-Taking Once Again (with and without Tax Revenue Disposal). AA Yale University. SR Yale Economic Growth Center Discussion Paper: 679; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven, CT 06520. PG 25. PR $2.00. JE D51, H23, D81, G11. KW Stochastic Growth. General Equilibrium.
AB The effects of taxation on risk-taking crucially depends on what happens to tax revenue. In the literature, this is implicitly disposed of (partial equilibrium), it turns into government consumption or it is redistributed to investors in a lump-sum fashion (general equilibrium). Building upon Merton's intertemporal CAPM, this paper proposes a simple general equilibrium framework of analysis where taxes affect portfolio composition both directly, via tax rates on income from financial assets, and indirectly, via their effect on the stochastic properties of the return on government bonds. In the economy, there exists a set of productive assets characterized by stochastic constant returns to scale. The distribution of aggregate output will therefore depend on the portfolio allocation by the private agents. The analysis will discuss the implication of fiscal policy for both intertemporal and intratemporal efficiency, pointing out the difference in results when moving from a partial to a general equilibrium perspective.

Courchene, Thomas J.
PD April 1992. TI A First Nations Province. AU Courchene, Thomas J.; Powell, Lisa M. AA Queen's University. SR University of Western Ontario Papers in Political Economy: 26; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. PG 56. PR no charge. JE H11, H73, H80. KW Aboriginal Peoples. Self

Government. Canada.
AB In Shaping Canada's Future Together: Proposals (1991) the Government of Canada proposes to entrench a justiciable right to aboriginal self-government within the Canadian constitution. Many Canadians are very leery of a largely open-ended constitutionalizing of an inherent right to aboriginal self-government. What powers are involved? What are the costs? The purpose of this paper is to address this issue head on, as it were, and to define, describe and tentatively evaluate one approach to aboriginal self-government, namely assigning provincial status to the First Nations. As the title of the paper indicates, we shall refer to this as a First Nations Province (FNP). The thrust of the analysis will be to focus on the implications of an FNP in terms of the range of powers, the relationships with existing governments and the likely financial implications.

Craine, Roger
PD June 1993. **TI** Asset Prices and the Fundamentals: A Q Test. **AA** University of California, Berkeley. **SR** University of California at Berkeley Working Paper in Economics: 93-214; IBER, 156 Barrows Hall, University of California, Berkeley, CA 94720. **PG** 12. **PR** $3.50 U.S.A. and Canada. $7.00 foreign. **JE** E44, C15. **KW** Investment. Tobin's q.
AB This paper presents a test of the relationship between financial asset values and the fundamentals. The test is an indirect test based on Tobin's (1969) q model of investment. The advantage of this test is that it avoids conditioning on a specific model of equilibrium returns by substituting an observable proxy, capital, for the unobservable fundamental value of the firm. Section 1 of this paper shows that under mild restrictions the value of capital and the financial value of the firm should move together even if marginal or average q does not accurately describe the actual investment decision rule. Section 2 of the paper presents the results of tests for violations of the mean reversion restriction. The tests cannot reject the unit root null hypothesis for a long annual sample from 1926 through 1988 or a quarterly post WWII sample. Section 3 examines the power of the tests with Monte Carlo simulations. The empirical evidence presented in this paper provides fairly strong evidence against the hypothesis that the financial and real values are closely linked in the short run.

Cutler, David
PD March 1993. **TI** The Incidence of Adverse Medical Outcomes under Prospective Payment. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4300; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** $5.00. **JE** I11, I18, H51. **KW** Health Care. Reimbursement. Government Health Policy.
AB This paper examines the effect of prospective payment for hospital care on adverse medical outcomes. In 1983, the federal government replaced its previous cost-based reimbursement method with a prospective payment system, where reimbursement depends only on the diagnosis of the patient. Hospitals thus lost the marginal reimbursement they received for providing additional treatments. In addition, the average price each received changed with fixed reimbursement. This paper related each of these changes to adverse outcomes, with two conclusions. First, there is a change in the timing of deaths associated with changes in average prices. In hospitals with price declines, a greater share of deaths occur in the hospital or shortly after discharge, but by one or two years post-discharge, this difference in mortality rates disappears. Second, there is a trend increase in readmission rates caused by the elimination of marginal reimbursement. This appears to be due to accounting changes on the part of hospitals, however, rather than true changes in morbidity.

PD March 1993. **TI** Why Doesn't the Market Fully Insure Long-Term Care? **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4301; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** $5.00. **JE** G22, I11. **KW** Health Insurance. Risk Diversification.
AB This paper examines the failure of the private market to fully insure long-term care. I argue that the failure is a result of large intertemporal variability in the cost of long-term care. Unlike variability in cross section use, variability in the cost of care affects everyone in a pool and therefore cannot be diversified within a cohort. Further, since costs are serially correlated, the cost risk cannot be diversified across cohorts. Estimates suggest that the standard deviation of cost uncertainty is on the order of 4 to 14 percent for an average long-term care policy. In response to this cost risk, most long-term care policies do not insure real benefits. Policies generally pay a fixed nominal amount for care, which is updated using predetermined nominal rules. Many policies also have lifetime maximum payments and other restrictions on aggregate risk bearing by the insurer. The lack of complete long-term care insurance may be one explanation for the low rate of purchase of long-term care policies.

PD March 1993. **TI** Policy Options for Long-Term Care. **AU** Cutler, David; Sheiner, Louise. **AA** Cutler: Harvard University and National Bureau of Economic Research. Sheiner: U.S. Congress. **SR** National Bureau of Economic Research Working Paper: 4302; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 45. **PR** $5.00. **JE** I11, I18, H51, J14. **KW** Nursing Homes. Medicaid. Health Care.
AB This paper examines the effect of government nursing home policies on institutionalization rates and support for the elderly in the community. We combine data from the National Long Term Care Survey with information on state policies to estimate these effects. We examine two state polices for nursing home care: the ability of some high income elderly to receive Medicaid support, and the price differential between Medicaid and the private market. Both policies strongly affect aggregate nursing home utilization, as well as the composition of nursing home residents. The marginal source of community care for the institutionalized elderly appears to be support from children or other helpers, rather than living alone. Almost all of the elderly in nursing homes would have lived with children or others had they been in the community. In addition, as the ease of acquiring Medicaid increases or Medicaid payments become more generous, fewer elderly receive substantial day-to-day help from their children.

d'Aspremont, Claude
PD November 1992. **TI** General Equilibrium Concepts Under Imperfect Competition: A Cournotian Approach. **AU** d'Aspremont, Claude; Dos Santos, Ferreira R.; Gerard-

Varet, Louis-Andre. **AA** d'Aspremont: Universite Catholique de Louvain. Dos Santos Ferreira: Universite Louis Pasteur. Gerard-Varet: Universite d'Aix-Marseille. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9257; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 30. **PR** not available. **JE** D51, L13, D43. **KW** Monopolistic Competition. Strategic Agents.
AB In a pure exchange economy we propose a general equilibrium concept under imperfect competition, the "Cournotian Monopolistic Competition Equilibrium", and compare it to the Cournot-Walras and the Monopolistic Competition concepts. The advantage of the proposed concept is to simplify the calculations attributed to strategic agents. Then we study the connection of these concepts to a general concept of P-equilibrium which is extended to economies with production.

PD February 1993. **TI** Moral Hazard in Teams and Repeated Partnership: The Role of Information Quality. **AU** d'Aspremont, Claude; Gerard-Varet, Louis-Andre. **AA** d'Aspremont: Universite Catholique de Louvain. Gerard-Varet: Ecole des Hautes Etudes en Sciences Sociales. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9308; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 19. **PR** not available. **JE** D81, D82, L14. **KW** Principal-Agent Model. Joint Output. Monitoring.
AB We analyze the sharing of an uncertain joint output among risk-neutral members of a team whose actions are not observable. Adapting techniques used to treat the pure adverse selection problem to this team moral hazard problem, we define a first condition that is sufficient to implement a first best joint action and a second condition that is sufficient to implement any joint action. These conditions hold generically. Finally we show the usefulness of such conditions in repeated partnership with imperfect monitoring and prove a folk-theorem.

Dalebout, Arco
TI An Integrated Perspective on Designing Management Support Systems. **AU** Dutta, Soumitra; Wierenga, Berend; Dalebout, Arco.

Danthine, Jean-Pierre
PD May 1993. **TI** Computing Equilibria of Non-Optimal Economies. **AU** Danthine, Jean-Pierre; Donaldson, John B. **AA** Danthine: Universite de Lausanne. Donaldson: Columbia University. **SR** Universite de Lausanne, Cahiers de Recherches Economiques: 9306; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny, CH-1015 Lausanne, SWITZERLAND. **PG** 43. **PR** no charge. **JE** C63, C68, E32. **KW** Dynamic Equilibrium. Computation. Tax Distortion.
AB This paper surveys the different approaches that have been proposed for the computation of dynamic equilibria of economies for which the equilibrium is not a Pareto-optimum. The alternative methods discussed are illustrated in the context of an economy with a simple tax distortion.

Datta, Manjira
PD March 1993. **TI** Stationary Temporary Equilibrium in a Model of Trade and Optimal Accumulation. **AA** Universite Libre de Bruxelles, Universite Catholique de Louvain and University of Saskatchewan. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9312; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 14. **PR** not available. **JE** D51, D90, C62. **KW** Intertemporal Allocation. General Equilibrium Model.
AB This paper is an attempt to analyze certain intertemporal aspects of the movement of prices in the world market in a general equilibrium framework. A model of a competitive economy consisting of several "small" countries engaged in consumption, production and trade is developed here. The intertemporal allocation decisions are derived from solving dynamic optimization involving a constrained maximization of a discounted sum of one period utilities from consumption over an infinite horizon. Following Hicks, one way to look at the evolution of an economic system is to view it as a succession of temporary or short-run competitive equilibria. The main focus of the paper is in providing the existence of temporary equilibrium. A set of sufficient conditions are provided for the equilibrium to be unique and stationary.

Dawar, Niraj
PD October 1992. **TI** Cultural Universals in Marketing: A Study of Consumers' Use of Brand Name, Price, Physical Appearance, and Retailer Reputation as Signals of Product Quality. **AU** Dawar, Niraj; Parker, Philip. **AA** INSEAD. **SR** INSEAD Working Papers: 92/66/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 30. **PR** not available. **JE** L15, M31, D12. **KW** Product Quality. Marketing.
AB Are certain consumer behaviors universal to all cultures? Using multiple definitions of culture, we explore the universality of consumers' use of the four "P's" as signals of product quality. Does the reliance on product quality signals vary from one culture to another? Across the four product quality signals studied, empirical evidence representing various cultural groups suggests that people around the world rely on marketing signals to a similar degree for the product category studied (consumer electronics). We find that the more specific a signal is to the products concerned, the more likely it is that the signal will be used, and to the same degree, across cultures. Finally, individual factors appear to be better predictors of signal use than differences in culture.

PD March 1993. **TI** Determining the Order and Direction of Multiple Brand Extensions. **AU** Dawar, Niraj; Anderson Paul F. **AA** Dawar: INSEAD. Anderson: Pennsylvania State University. **SR** INSEAD Working Papers: 93/17/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 26. **PR** not available. **JE** L21, M11, M31. **KW** New Products. Product Introduction.
AB The process of managing a successful brand involves leveraging the brand's equity to profitable ends. Brand extension provides a means of capitalizing on brand equity. This paper examines the importance of the order and direction of in brand extension. Two experiments provide evidence for effects of order and direction of extension on the perceived coherence of the brand and purchase likelihood of the extension. Results show that undertaking extensions in a particular order allows distant extensions to be perceived as coherent and that following a consistent direction in extension allows for greater coherence and purchase likelihood for the target extension.

De Gregorio, Jose
PD December 1992. TI Financial Development and Economic Growth. AU De Gregorio, Jose; Guidotti, Pablo E. AA International Monetary Fund. SR International Monetary Fund Working Paper: 92/101; International Monetary Fund, Washington, DC 20431. PG 23. PR not available. JE O16, O54, O40. KW Investment. Financial Development.
AB This paper examines the empirical relationship between long-run growth and the degree of financial development, proxied by the ratio of bank credit to the private sector as a fraction of GDP. We find that this proxy enters significantly and with a positive sign in growth regressions on a large cross-country sample, but with a negative sign using panel data for Latin America. Our findings suggest that the main channel of transmission from financial development to growth is the efficiency of investment, rather than its volume. We also present a model where the negative correlation between financial intermediation and growth results from financial liberalization in a poor regulatory environment.

PD March 1993. TI Savings, Growth and Capital Markets Imperfections: The Case of Borrowing Constraints. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/93/31; International Monetary Fund, Washington, DC 20431. PG 22. PR not available. JE E21, O16, O41. KW Human Capital Accumulation. Investment.
AB This paper studies the effects that borrowing constraints have on savings and growth and argues that, though they increase savings, their effect on growth is ambiguous. Empirical evidence on the extent of borrowing constraints as well as savings, investment, human capital accumulation and growth performance for industrialized countries is presented. A simple model to show the effects of borrowing constraints on savings is developed. Then the model is extended to analyze the effects of borrowing constraints on human capital accumulation and growth. It is shown that borrowing constraints increase savings, but reduce human capital accumulation.

De Meyer, Bernard
PD March 1993. TI Repeated Games and the Central Limit Theorem. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9303; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 9. PR not available. JE C73. KW Repeated Games. Normal Density.
AB not available.

De Souza, C. C.
PD October 1992. TI A New Approach to Minimizing the Frontwidth in Finite Element Calculations. AU De Souza, C. C.; Keunings, R.; Wolsey, Laurence A.; Zone, O. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9255; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 20. PR not available. JE C61, C63. KW Graph Theory. Optimization.
AB We propose a new approach to determine the element ordering that minimizes the frontwidth in finite element computations. The optimization problem is formulated using graph theoretic concepts. We develop a divide-and-conquer strategy which defines a series of graph partitioning subproblems. The latter are tackled by means of three different heuristics. Results obtained for various 2D and 3D finite element meshes, whether structured or non-structured, reveal the superiority of the proposed approach relative to the standard Cuthill-McKee "greedy" algorithms. Relative improvements in frontwidth are in the range 25 - 50% in most cases. The best results are obtained with the divide-and-conquer approach are robust with respect to mesh refinement and vary little in solution quality from one run to another.

De Wolf, Daniel
PD November 1992. TI A Stochastic Version of a Stackelberg-Nash-Cournot Equilibrium Model. AU De Wolf, Daniel; Smeers, Yves. AA De Wolf: Universite Catholique de Louvain and Universite Libre de Bruxelles. Smeers: Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9258; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 13. PR not available. JE C73, L13, D21. KW European Gas Market. Stackelberg Leader.
AB We consider a stochastic version of the Stackelberg-Nash-Cournot model proposed by Murphy et al. (1983). In the first stage, the leader chooses and announces his production level taking into account the reaction of the followers. The decision of the leader is taken when market demand is uncertain. In the second stage, the followers, knowing the leader's output, react to this level according to the Cournot assumption. At this stage, demand is known. We study the extension of the Murphy et al. model and give a numerical illustration of this model using the European gas market.

PD April 1993. TI Optimal Dimensioning of Pipe Networks with Application to Gas Transmission Networks. AU De Wolf, Daniel; Smeers, Yves. AA De Wolf: Universite Libre de Bruxelles. Smeers: Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9315; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 28. PR not available. JE C61, L95. KW Nonsmooth Optimization. Bundle Method.
AB We develop an algorithm to solve the problem of the optimal dimensioning of a fluid (gas or water) transmission network when the topology of the network is known. The pipe diameters must been chosen to minimize the sum of the investment cost and of the operations cost. This two level problem is solved by application of the bundle method for nonsmooth optimization. The validity of the approach is tested on a problem corresponding to a real situation: the optimal design of a reinforcement of the Belgian gas network.

Deaton, Angus
PD April 1993. TI Intertemporal Choice and Inequality. AU Deaton, Angus; Paxon, Christina. AA Deaton: Princeton University and National Bureau of Economic Research. Paxon: Princeton University. SR National Bureau of Economic Research Working Paper: 4328; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 41. PR $5.00. JE D91, D31. KW Income Inequality. Consumption. Permanent Income Hypothesis.
AB We show that standard models of intertemporal choice, including the permanent income hypothesis, imply that for any given cohort of people born at the same time, inequality in both

consumption and income will grow with age. At any given date, each individual's consumption depends on the integral of unanticipated earnings shocks up to that date, so that consumption becomes more dispersed with time. If earnings are not themselves similarly dispersing, assets will do so, so that the dispersion of total income will increase, irrespective of the behavior of earnings. Because the result applies to an increase in inequality over time within a given age cohort, it has no immediate implications for the behavior of inequality in the economy as a whole, and is consistent with constant aggregate inequality over time. Cohort data show that within-cohort consumption and income inequality does indeed grow with age in all three economies, and that the rate of increase is broadly similar in all three.

PD April 1993. **TI** Saving, Growth, and Aging in Taiwan. **AU** Deaton, Angus; Paxson, Christina H. **AA** Deaton: Princeton University and National Bureau of Economic Research. Paxson: Princeton University. **SR** National Bureau of Economic Research Working Paper: 4330; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** $5.00. **JE** D91, J11, O53. **KW** Household Saving. Life Cycle Theory.
AB This paper examines issues of household saving, growth, and aging in Taiwan. The Taiwanese patterns of high income growth, declines in fertility, and increases in life expectancy all have implications for life- cycle saving. We use data from fifteen consecutive household income and expenditure surveys, from 1976 to 1990, to examine whether observed profiles of consumption and saving are consistent with life-cycle theory. The patterns of consumption and saving across households of different ages and cohorts appear to be broadly consistent with a life-cycle model. However, the data also indicate that household consumption tracks income closely, and this evidence casts doubt on simple life-cycle theory.

DeFina, Robert
TI Regional Income Dynamics. **AU** Carlino, Gerald; DeFina, Robert.

Dekel, Eddie
TI On the Relationship Between Mutation Rates and Growth Rates in a Changing Environment. **AU** Porath, Elchanan Ben; Dekel, Eddie; Rustichini, Aldo.

Dellas, Harris
PD April 1993. **TI** Market Structure and Growth. **AU** Dellas, Harris; Mueller, Dennis. **AA** University of Maryland. **SR** University of Maryland Department of Economics Working Paper: 93-2; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 23. **PR** no charge. **JE** L16, E13, O41. **KW** Innovation. Industry Growth.
AB This paper investigates the empirical relationship between market structure and industry growth. The average growth of sales in the four digit subdivisions of two digit manufacturing industries is related to corresponding measures of concentration for the periods 1967-1982 and 1972-1982. The results from sixteen 2-digit industries suggest the lack of a significant relationship between industry growth and market concentration in industries that are mostly innovation users; and a mostly negative one in innovation producing industries. One may attempt to use these findings to evaluate the validity of alternative theories of economic growth (convex vs.

nonconvex, endogenous vs. exogenous) as they may be distinguishable on the basis of their implication for the relationship between market structure and growth. Romer's (1990) model seems to be the most consistent with the evidence.

Dermine, Jean
PD October 1992. **TI** The Regulation of International Financial Services. **AA** INSEAD. **SR** INSEAD Working Papers: 92/65/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 24. **PR** not available. **JE** F15, F36, F42, G28. **KW** Economic Integration. Banking Regulation. Banking Industry.
AB The integration of the financial services industry in Europe has forced consideration of the legal and regulatory issues involved in the creation of a single economic market. As financial services are heavily regulated, the creation of a common market focuses attention on the need for centralized regulation, harmonization of national regulations, and allocation of responsibility among national regulators and supervisors. In the first part, I present the European Banking Industry and analyze the early effects of European integration. In the second part, I analyze the regulatory framework proposed by the European Commissions for the integration of financial markets. I argue that more work remains to be done to achieve open and stable markets.

Devereux, Michael B.
TI A Dynamic Model of Trade Union Contract Duration. **AU** Bodman, Phillip M.; Devereux, Michael B.

Dewatripont, M.
TI Renegotiation Design with Unverifiable Information. **AU** Aghion, P.; Dewatripont, M.; Rey, P.

Di Calogero, Robert
PD December 1992. **TI** Money and Banking Statistics in Former Soviet Union (FSU) Economies. **AU** Di Calogero, Robert; Nahr, K. Wilhelm; Stillson, Richard T. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 92/103; International Monetary Fund, Washington, DC 20431. **PG** 27. **PR** not available. **JE** C82, P34, E58. **KW** Currency Circulation. Monetary Aggregation. Former Soviet Union.
AB This paper addresses the major issues concerning the compilation of money and banking statistics for the fifteen republics of the former Soviet Union (FSU), including (1) the treatment of ruble currency circulation and (2) the classification of claims on FSU financial institutions. The paper proposes the use of a monetary authorities' account to encompass both the domestic and foreign aspects of ruble currency circulation and a classification scheme for monetary accounts that permits the construction of analytically meaningful monetary aggregates. These issues are addressed within an analytical framework that transforms the Gosbank Accounting System into monetary statistics broadly consistent with the Fund's methodology.

Diebold, Francis X.
PD February 1993. **TI** Exact Maximum Likelihood Estimation of ARCH Models. **AU** Diebold, Francis X.; Schuermann, Til. **AA** University of Pennsylvania. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 93-4; Working Papers, Department of Research, Federal

Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 11. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** C13, C14, C15. **KW** MLE. Density Estimation.

AB Since the original work of Engle (1982), the possibility of exact maximum likelihood estimation (MLE) of ARCH and GARCH models has remained an open question. To date, only approximate MLE has been attempted because the unconditional density needed for exact MLE is not known in closed form. Using simulation and nonparametric density estimation techniques that facilitate empirical likelihood evaluation, we develop an exact MLE procedure, establish its superior sampling properties relative to three commonly used approximations, and illustrate its feasibility. We find that especially for small sample sizes and near-integrated processes, the efficiency gains can be substantial.

TI On Maximum-Likelihood Estimation of the Differencing Parameter of Fractional Integrated Noise with Unknown Mean. **AU** Cheung, Yin-Wong; Diebold, Francis X.

PD April 1993. **TI** Testing Structural Stability with Endogenous Break Point: A Size Comparison of Analytic and Bootstrap Procedures. **AU** Diebold, Francis X.; Chen, Celia. **AA** University of Pennsylvania. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 93-11; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 15. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** C12, C52. **KW** Structural Change. Bootstrap Approximation.

AB We compare the performance of two alternative approximations to the finite-sample distributions of test statistics for structural change, one based on asymptotics and one based on the bootstrap. We focus on tests acknowledging that the break point is selected endogenously--in particular, the "supremum" tests of Andrews (1990). We explore a variety of issues of interest in applied work, including the effects of sample size, strength of data persistence, and departures from normality. The bootstrap approximation to the finite-sample distribution appears consistently accurate, in contrast to the asymptotic approximation. The result are of interest not only from the perspective of testing for structural change but also from the broader perspective of compiling evidence on the adequacy of bootstrap approximations to finite-sample distributions in econometrics.

PD May 1993. **TI** Regime Switching with Time-Varying Transition Probabilities. **AU** Diebold, Francis X.; Lee, Joon-Haeng; Weinbach, Gretchen C. **AA** Diebold and Weinbach: University of Pennsylvania. Lee: Korea Securities Research Institute. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 93-12; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 15. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** C13, C51, E32, F31. **KW** Markov Switching Model.

AB The Markov switching model is useful because of the potential it offers for capturing occasional but recurrent regime shifts in a simple dynamic econometric model. Existing treatments, however, restrict the transition probabilities to be constant over time; that is, the probability of switching from one regime to the other cannot depend on the behavior of underlying economic fundamentals. In contrast, we propose a class of Markov switching models in which the transition probabilities can vary with fundamentals. We develop an EM algorithm for estimation of the model, and we illustrate it with a simulation example. We conclude with a discussion of directions for future research, including application to exchange rate and business-cycle modeling.

Din, Musleh-ud

PD March 1993. **TI** Is Enclave Sector a Cure for Unemployment in LDC's? **AA** Johns Hopkins University. **SR** Johns Hopkins Department of Economics Working Paper: 304; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 5. **PR** no charge. **JE** F21, E24, L52. **KW** Foreign Capital Inflow.

AB In the framework of a simple general equilibrium model, this note demonstrates that the establishment of an enclave sector through foreign capital inflow does not always reduce unemployment in a labor surplus developing economy. We point out a case where such capital inflows paradoxically accentuate the problem of unemployment in the host economy.

PD March 1993. **TI** Export Processing Zones and Backward Linkages. **AA** Johns Hopkins University. **SR** Johns Hopkins Department of Economics Working Paper: 305; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 12. **PR** no charge. **JE** F21, L52. **KW** Foreign Capital Inflow. Foreign Investment.

AB This paper develops a model for a small developing economy which establishes Export Processing Zones (EPZ's). The model explicitly incorporates an intermediate goods-producing sector in the analysis to evaluate the contribution of foreign capital inflow in the EPZ's in engendering backward linkages in the host economy. It is shown that if the intermediate good is internationally traded, then an increase in foreign capital inflow in the EPZ's has no effect on national income of the host country. However, if the intermediate good is non-traded, then there exist possibilities for improvement in national income of the host country as a result of increased foreign investment in the EPZ's.

Disney, Richard

PD March 1993. **TI** What Has Happened to Union Recognition in Britain? **AU** Disney, Richard; Gosling, Amanda; Machin, Stephen. **AA** Disney: Institute of Fiscal Studies and University of Kent. Gosling: University College London. Machin: London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 130; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 13. **PR** no charge. **JE** J51, J53. **KW** Industrial Relations.

AB This paper examines the determinants of union recognition status using data from the three Workplace Industrial Relations Surveys of 1980, 1984, and 1990. Our theoretical approach argues that the level of industry quasi-rents and union density at the time of the establishment's set-up should be considered the crucial determinants of recognition status. Confirmation of these predictions is found for private sector manufacturing establishments in the econometric analysis. Of particular interest are the non-linear relationship

between historic industry quasi-rents and recognition status and the stability of the model over the three data sets, although there is evidence for a marked downward shift in recognition probabilities during the 1980's.

Donaldson, John B.
TI   Computing Equilibria of Non-Optimal Economies.
AU   Danthine, Jean-Pierre; Donaldson, John B.

Dos Santos, Ferreira R.
TI   General Equilibrium Concepts Under Imperfect Competition: A Cournotian Approach. AU   d'Aspremont, Claude; Dos Santos, Ferreira R.; Gerard-Varet, Louis-Andre.

Doukhan, P.
PD   October 1992. TI   Non Linear ARX-Models: Probabilistic Properties and Consistent Recursive Estimation. AU   Doukhan, P.; Tsybakov, A. AA   Doukhan: Universite Paris-Sud. Tsybakov: Institute for Problems of Information Transmission Academy of Sciences, Moscow, and Universite Catholique de Louvain. SR   Universite Catholique de Louvain CORE Discussion Paper: 9256; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG   14. PR   not available. JE   C32, C14.   KW Nonlinear   Processes.   Ergodic   Processes. Nonparametric Estimation.
AB   Consider the general ARX (k,q) nonlinear process defined by the recurrences relation $y(n) = f(y(n-1),...,y(n-k),x(n),...,x(n-q+1)) + s(n)$ where $\{x(n)\}$, $\{s(n)\}$ are independent i.i.d. sequences. We study some probabilistic properties of this process in the ergodic situation and propose a recursive estimator of the stochastic gradient kind of the function f which is strongly consistent.

Dow, James
PD   April 1993. TI   Arbitrage Chains. AU   Dow, James; Gorton, Gary. AA   Dow: London Business School. Gorton: University of Chicago, University of Pennsylvania and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 4314; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   27. PR $5.00. JE   G14, D82. KW   Efficient Markets. Arbitrage.
AB   In efficient markets the price should reflect the arrival of private information. The mechanism by which this is accomplished is arbitrage. A privately informed trader will engage in costly arbitrage, that is, trade on his knowledge that the price of an asset is different from the fundamental value if: (1) his order does not move the price immediately to reflect the information; (2) he can hold the asset until the date when the information is reflected in the price. We study a general equilibrium model in which all agents optimize. In each period, there may be a trader with a limited horizon who has private information about a distant event. Whether he acts on his information, and whether subsequent informed traders act, is shown to depend on the possibility of a sequence or chain of future informed traders spanning the event date. An arbitrageur who receives good news will buy only if it is likely that, at the end of his trading horizon, a subsequent arbitrageur's buying will have pushed up the expected price. We show that limited trading horizons result in inefficient prices because informed traders do not act on their information until the event date is sufficiently close.

PD   April 1993. TI   Profitable Informed Trading in a Simple General Equilibrium Model of Asset Pricing. AU Dow, James; Gorton, Gary. AA   Dow: London Business School. Gorton: University of Chicago, University of Pennsylvania and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 4315; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   42. PR $5.00. JE   D51, G12. KW   Informed Trading.
AB   This paper presents a simple general equilibrium model of asset pricing in which profitable informed trading can occur without any "noise" added to the model. It shows that models of profitable informed trading must restrict the portfolio choices of uninformed traders: in particular, they cannot buy the market portfolio. In this model, profitable informed trading lowers the welfare of all agents when compared across steady states.

Dreze, Jacques H.
PD   December 1992. TI   "1 Market +1 (Tight) Money = 2 Rules of Fiscal Discipline": Europe's Fiscal Stance Deserves Another Look. AA   Universite Catholique de Louvain. SR   Universite Catholique de Louvain CORE Discussion Paper: 9263; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG   30. PR   not available. JE   F15, F42, E62. KW   European   Community.   Fiscal   Policy.   Policy Coordination.
AB   It is argued that the aggregate fiscal stance of EC 12 is a significant determinant of output and employment in the Community; it deserves more attention than it received in Maastricht. The significance of aggregate demand is illustrated by econometric evidence from the European Unemployment Program (EUP) and from simulations of the COMPACT and QUEST models. The conditions for effectiveness and efficiency of fiscal policy are discussed. Effectiveness requires EC-level coordination, and parallel supply-side measures of wage moderation and monetary accommodation Combining the EUP macroeconomic framework with the CAPM pricing of risks, it is shown that efficiency of fiscal stimulation requires a faster development of aggregate supply, with an allowance for risk proportional to the expected growth rate of aggregate output.

Driffill, John
PD   July 1992. TI   Is the Road to Monetary Union Paved With Recession? AU   Driffill, John; Miller, Marcus. AA   Driffill: Queen Mary and Westfield College and CEPR. Miller: University of Warwick and CEPR. SR   Aarhus Institute of Economics Memo: 1993-10; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. PG   10. PR   no charge. JE   F41, E52, F31.   KW   Fixed   Exchange   Rates. Disinflation. Credibility.
AB   We examine wages, prices, and output in an inflationary economy which attempts to achieve price stability by imposing a pegged exchange rate. Wages are set on the basis of expected future prices and aggregate demand. An imperfectly credible peg will lead to long-run unemployment. If the peg becomes credible over time, the unemployment eventually disappears. But this requires a long recession and a period of negative inflation. An attempt to devalue to restore competitiveness when zero inflation is achieved can be counterproductive, depending on what inferences agents draw from it about future devaluations.

PD February 1993. **TI** A Reconciliation of Some Paradoxical Empirical Results on the Expectations Model of the Term Structure. **AU** Driffill, John; Psaradakis, Zacharias; Sola, Martin. **AA** Driffill: University of Southampton. Psardakis: University of Bristol. Sola: London Business School. **SR** University of Bristol Working Paper: 93/345; Department of Economics, University of Bristol, 8 Woodland Road, BS8 1TN, ENGLAND. **PG** 21. **PR** no charge. **JE** E43, E44. **KW** Interest Rates.

AB We attempt to reconcile contradictory empirical results for the expectations model of the term structure which are found when it is tested by a variety of methods based on single-equation and vector autoregressive models. Our data is quarterly for three-month and six-month U.S. treasury bills for the period 1962 to 1970. We argue that a model in which short term interest rates follow a random walk, (or a process close to a random walk), financial markets have information not available to the econometrician which is useful in forecasting future changes in short rates, and in which there are random deviations from the pure expectations model, is consistent with the data and the empirical findings.

Duffie, Darrell
TI Asset Pricing with Heterogeneous Consumers. **AU** Constantinides, George M.; Duffie, Darrell.

Dutta, Soumitra
PD not available. **TI** An Integrated Perspective on Designing Management Support Systems. **AU** Dutta, Soumitra; Wierenga, Berend; Dalebout, Arco. **AA** Dutta: INSEAD. Wierenga and Dalebout: Erasmus University. **SR** INSEAD Working Papers: 93/15/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 36. **PR** not available. **JE** L88, M31. **KW** Decision Support Systems. Computer Systems. Decision Making.

AB This research presents a new integrated framework for the design of management support systems (MSS's). Three different views of decision making (outcome, process, and learning) are combined with three different role (automate, informate, and stimulate) and system (restrictiveness, guidance, and customizability) perspectives. The role perspective focuses on the intended impact of the MSS on the decision maker(s) and the system perspective emphasizes the impact of the MSS system design on the decision support possibilities. The dominant matches in the proposed integrated framework (outcome, automate, and restrictiveness), (process, informate, and guidance), and (learning, stimulate, and customizability) define the typical decision making situations and have implications for the design of appropriate MSS's. The implementation of these conceptual ideas is illustrated in Brandframe, a MSS for supporting a brand manger in the domain of fast moving consumer goods.

TI Case-Based Decision Support. **AU** Angehrn, Albert; Dutta, Soumitra.

Eberhart, Allan C.
TI Do Priority Provisions Protect a Bondholder's Investment? **AU** Altman, Edward I.; Eberhart, Allan C.

Edison, Hali
TI A Utility Based Comparison of Some Models of Exchange Rate Volatility. **AU** West, Ken D.; Edison, Hali; Cho, Dongchul.

Edwards, Sebastian
PD April 1993. **TI** The Political Economy of Inflation and Stabilization in Developing Countries. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4319; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 42. **PR** $5.00. **JE** O11, E31, E32, E61. **KW** Chile. Political Business Cycles.

AB This paper deals with political aspects of inflation and stabilization in developing countries. It is argued that by ignoring political considerations, traditional models failed to fully understand the dynamics of inflation. Several newer models are discussed, including models based on strategic government behavior and war of attrition models. Empirical results obtained with developing countries data are discussed in detail. Data on Chile are used to test several versions of political business cycle models. It is found that this perspective helps explain the evolution of inflation through time in that country. Finally, data on a large cross section of countries are used to investigate the political-economy circumstances surrounding major devaluation crises.

PD April 1993. **TI** Exchange Rates, Inflation and Disinflation: Latin American Experiences. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4320; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 49. **PR** $5.00. **JE** F31, E31, O54. **KW** Fixed Exchange Rates. Monetary Policy.

AB This paper analyzes the relationship between exchange rates, inflation and disinflation in Latin America. The analysis concentrates on two central issues. First, the historical experience with fixed exchange rates in four Latin American countries is investigated. It is shown that even though these countries had the ability to undertake independent monetary policy, they chose to play by the "rules of the game." Until 1973, when the first oil shock took place, these countries strictly respected the constraints imposed by fixed exchange rates on their domestic credit policy. Between that date and the late 1980's, when the fixed rates were finally abandoned, they tried to ignore these constraints. This generated losses of reserves and increased inflation. The second issue addressed in the paper refers to the use of a nominal exchange rate anchor to reduce inflation. Data on Chile, Mexico and Venezuela are used to investigate the extent to which alternative exchange rate regimes affect inflationary inertia.

Eichengreen, Barry
TI Monetary and Exchange Rate Arrangements for NAFTA. **AU** Bayoumi, Tamim A.; Eichengreen, Barry.

El-Erian, Mohamed A.
PD April 1993. **TI** Economic Reform in Arab Countries: A Review of Structural Issues for the Remainder of the 1990s. **AU** El-Erian, Mohamed A.; Tareq, Shamsuddin. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/39; International Monetary Fund, Washington, DC 20431. **PG** 16. **PR** not available. **JE** O53, O11, E61, E66. **KW** Middle East.

Economic Policy.

AB The paper reviews the main structural reform issues facing Arab countries in the remainder of the 1990's. While the nature, extent, and implications of the policy challenges differ among individual countries in the Arab region, several aspects are common to a large number of them. Accordingly, the paper identifies a framework consisting of a core of key reforms that would address these countries' structural weaknesses and assist them in exploiting their considerable economic potential.

Elbe, Frank
TI Aspects of Euro-American Cooperation. **AU** Gann, L. H.; Widmaier, Hans Peter; Elbe, Frank.

Entorf, H.
PD January 1993. **TI** Constructing Leading Indicators from Non-Balanced Sectoral Business Survey Series. **AA** INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9313; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 19. **PR** no charge. **JE** E32, C82. **KW** Survey Data. Business Cycles.

AB This paper considers the construction of leading indicators based on monthly survey data from the Ifo Institute, Munich. The three main points covered in the paper are: a) The use of survey data at the sectoral level results in a longer leading indicator. By taking a non-balanced form of the survey answers and exploiting the information contained in "no change" responses through the use of canonical coherence, regressions on certain wave lengths lead to higher cross-spectral coherencies between the survey data and the actual business cycle, b) Comparisons of frequency domain and time domain results for lead-lag relationships highlight the roles of seasonal and business cycles and c) Out of sample forecasts reveal that the traditional balance concept is dominated by a weighted average of "worse" and "equal" responses. Surprisingly, the best results come from using the "worse" share.

Erickson, Timothy
PD May 1992. **TI** Restricting Regression Slopes in the Errors-in-Variables Model by Banding the Error Correlation. **AA** Erickson: Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 227; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 26. **PR** no charge. **JE** C10, C51. **KW** Errors in Variables.

AB Consider a linear regression where one of the explanatory variables is measured subject to an error having a possibly nonzero correlation p with the regression disturbance. It is well known that if $p=0$ then the coefficient on the unobserved true regressor must lie in the classical errors-in-variables interval given by the direct and reverse regression plims, with the coefficients on the correctly measured regressors similarly constrained to finite intervals. Here this result is generalized to situations where p may be nonzero, by showing that prior bounds on p may imply bounds on the regression coefficients. The results are most useful in situations where at issue is whether or not a coefficient lies in a given interval.

Ericson, Richard
PD December 1992. **TI** An Alternative Theory of Firm and Industry Dynamics. **AU** Ericson, Richard; Pakes, Ariel.

AA Ericson: Columbia University and National Bureau of Economic Research. Pakes: Yale University and National Bureau of Economic Research. **SR** Yale Cowles Foundation Discussion Paper: 1041; Yale University, Cowles Foundation, Box 2125 Yale Station, New Haven, CT 06520. **PG** 45. **PR** no charge. **JE** D92, L11, C73, D40. **KW** Entry. R&D Investment. Exploratory Investment.

AB This paper provides a model of firm and industry dynamics that allows for entry, exit and firm-specific uncertainty generating variability in the fortunes of firms. It focuses on the impact of uncertainty arising from investment in research and exploration-type processes. It analyzes the behavior of individual firms exploring profit opportunities in an evolving marketplace and derives optimal policies, including exit, in this environment. Then it adds an entry process and aggregates the optimal behavior of all firms, including potential entrants, into a rational expectations, Markov perfect industry equilibrium, and proves ergodicity of the equilibrium process. Numerical examples are used to illustrate the more detailed characteristics of the stochastic process generating industry structures that results from this equilibrium.

Evans, George W.
PD April 1993. **TI** Adaptive Forecasts, Hysteresis and Endogenous Fluctuations. **AU** Evans, George W.; Honkapohja, Seppo. **AA** Evans: London School of Economics. Honkapohja: Academy of Finland and University of Helsinki. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 135; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 27. **PR** no charge. **JE** E32, C62, E61. **KW** Multiple Equilibria. Nonlinear Models. Business Cycles.

AB Standard linear macroeconomic models generate business cycles around a unique equilibrium through random productivity or preference shocks. Dynamic nonlinear models with multiple equilibria have the potential for endogenous fluctuations without exogenous shocks. This paper combines both approaches in a nonlinear model with multiple steady states due to a production externality. In the absence of policy changes, the driving forces generating fluctuations are exogenous random productivity shocks: without these shocks the economy would converge to a nonstochastic steady state. However, because there are multiple steady states, large productivity shocks of the right sign can shift the economy between high and low level stochastic steady states, providing an additional endogenous source of fluctuations. In this setting macroeconomic policy exhibits hysteresis (irreversibilities), and policy can be used to eliminate endogenous fluctuations.

Evans, William N.
TI The Probability Compression Effect: Estimation of Revealed Probabilities and Utility Functions for Uncertain Decisions. **AU** Viscusi, W. Kip; Evans, William N.

Fawzi, Samir
PD December 1992. **TI** Fund Transactions and Reserve Creation. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 92/107; International Monetary Fund, Washington, DC 20431. **PG** 21. **PR** not available. **JE** F39. **KW** External Reserves. International Monetary Fund.

AB This paper describes the effects of Fund transactions on

members' external reserves, estimates the net reserve creation or absorption by the Fund in the 1980's, and compares the role of the Fund in this respect with that of other sources of international reserves.

Feenstra, Robert C.

PD June 1993. **TI** Market Share and Exchange Rate Pass-Through in World Automobile Trade. **AU** Feenstra, Robert C.; Gagnon, Joseph E.; Knetter, Michael M. **AA** Feenstra: University of California, Davis. 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: 446; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 25. **PR** no charge. **JE** L13, L62, F12, F14. **KW** Imperfect Competition. International Trade.
AB This paper explores the relationship between exchange rate pass-through and market share for monopolistically competitive exporters. Under fairly general assumptions we show that pass-through should be high for exporters based in a country with a very large share of total destination market sales. For source countries with small and intermediate market shares, the theoretical relationship is potentially nonlinear and sensitive to assumptions about the nature of consumer demand and firm interactions. The model is estimated using a panel data set of automobile exports from France, Germany, Sweden, and the United States to a variety of destinations over the period 1970-88. The empirical relationship between pass-through and market share is significantly nonlinear: pass-through is lowest when the source country's market share is around 45 percent and it is highest when the source country's share approaches 100 percent.

Feldstein, Martin

PD March 1993. **TI** The Use of Monetary Aggregate to Target Nominal GDP. **AU** Feldstein, Martin; Stock, James H. **AA** Feldstein: National Bureau of Economic Research. Stock: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4304; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 41. **PR** $5.00. **JE** E52, E61. **KW** M2 Rule. Policy Rule. Monetary Policy.
AB This paper studies the possibility of using the broad monetary aggregate M2 to target the quarterly rate of growth of nominal GDP. Our findings indicate that the Federal Reserve could probably guide M2 in a way that reduces not only the long-term average rate of inflation but also the variance of the annual rate of growth of nominal GDP. An optimal M2 rule, derived from a simple VAR, reduces the mean ten-year standard deviation of annual GDP growth by over 20 percent. A much simpler policy based on a single equation linking M2 and GDP is shown to be almost as successful in reducing this annual GDP variance. Additional statistical tests indicate that M2 is a useful predictor of nominal GDP. Moreover, a battery of recently developed a tests for parameter stability fails to reject the hypothesis that the M2 - GDP link is stable, but the M1 - GDP and monetary base - GDP relations are found to be highly unstable.

PD April 1993. **TI** Monetary Policy and Inflation in the 1980's: A Personal View. **AA** National Bureau of Economic Research and Harvard University. **SR** National Bureau of

Economic Research Working Paper: 4322; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $5.00. **JE** E52, E65, A11. **KW** Monetary Policy.
AB This paper, which was written as a part of the NBER project on American economic policy in the 1980's, reviews some of the major changes in monetary policy during that period. The paper tries to explain why policies changed in the way that they did and looks particularly at the role of economists and economic analysis in shaping those developments.

PD April 1993. **TI** Tax Policy in the 1980's: A Personal View. **AA** National Bureau of Economic Research and Harvard University. **SR** National Bureau of Economic Research Working Paper: 4323; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $5.00. **JE** E62, E65, A11, H20. **KW** Taxation. Tax Reforms.
AB The tax reforms of the 1980's were the most substantial tax changes since the dramatic expansion of personal taxation during World War II. This paper, which was written as part of the NBER project on American economic policy in the 1980's, examines the nature of these changes and discusses the reasons why tax policies evolved as they did in the 1980's. Particular attention is given to the role of economic analysis in shaping the tax reforms.

PD April 1993. **TI** Government Spending and Budget Deficits in the 1980's: A Personal View. **AA** National Bureau of Economic Research and Harvard University. **SR** National Bureau of Economic Research Working Paper: 4324; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 51. **PR** $5.00. **JE** E62, E65, H62. **KW** Deficits. Government Spending.
AB This paper, which was written as part of the NBER project on American economic policy in the 1980's, examines the changes in government spending and budget deficits during the decade. The paper analyzes why the deficit increased substantially and looks at the policy options for reducing the deficit that were considered. The paper discusses the period when the author was a member of the Administration in greater detail than other years in the 1980's and seeks to explain why the policy choices evolved as they did.

PD April 1993. **TI** The Dollar and the Trade Deficit in the 1980's: A Personal View. **AA** National Bureau of Economic Research and Harvard University. **SR** National Bureau of Economic Research Working Paper: 4325; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $5.00. **JE** F31, F14. **KW** Exchange Rates. Trade Deficits.
AB The sharp gyrations of the dollar and of the trade deficit in the 1980's were among the most novel and least understood economic developments of the decade. This paper, which was written as part of the NBER project on American economic policy in the 1980's, examines the reasons for the dollar's swings and the nature of the policy debate about the appropriate government response to the rising and then falling dollar.

Feltenstein, Andrew

PD December 1992. **TI** Tax Policy and Trade Liberalization: An Application to Mexico. **AA** International

Monetary Fund. **SR** International Monetary Fund Working Paper: 92/108; International Monetary Fund, Washington, DC 20431. **PG** 18. **PR** not available. **JE** D58, F14, F13, E62, F41. **KW** Trade Reform. Fiscal Policy.
AB We construct a dynamic general equilibrium model of an open economy and use it to examine issues of trade liberalization in Mexico. In particular, we consider the fiscal implications of quotas and tariffs and, accordingly, their removal. We show that, in the short run, there may be negative revenue effects from tariff liberalization, so that it may be necessary to raise domestic taxes to compensate for the tariff reduction. We also show that these results are highly sensitive to behavioral shifts in exports. Since such shifts are quite likely given the nature of the trade reform currently being undertaken, it is important that we qualify our results accordingly.

Fernandez, Raquel
PD April 1993. **TI** Keeping People Out: Income Distribution, Zoning and the Quality of Public Education. **AU** Fernandez, Raquel; Rogerson, Richard. **AA** Fernandez: Boston University and National Bureau of Economic Research. Rogerson: University of Minnesota and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4333; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $5.00. **JE** H71, I22, R52. **KW** Zoning Regulations. Property Tax.
AB This paper examines the effect of community zoning regulations on allocations and welfare in a two-community model. Each community uses a local property tax to finance public education. Tax rates are determined by majority vote within each community, and individuals choose in which community to reside. We study exogenously imposed zoning regulations as well as the case where the regulator is endogenously determined by majority vote. Our analysis indicates that a number of outcomes are theoretically possible. Several interesting results emerge from simulations of the model. Although zoning tends to make the rich community more exclusive, this need not increase the quality of education in the rich community relative to the poor community. Welfare effects are not monotone in income; some lower income individuals benefit and some higher income individuals are made worse off when zoning is introduced.

Fershtman, Chaim
PD April 1993. **TI** Unobserved Delegation. **AU** Fershtman, Chaim; Kalai, Ehud. **AA** Fershtman: Tel Aviv University and Northwestern University. Kalai: Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1043; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. **PG** 18. **PR** $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. **JE** C72, L14, L22. **KW** Commitment. Observability.
AB The paper describes situations where commitment via delegation is beneficial, even when the delegation is unobservable and the players have the option to play the game themselves. The potential for such benefits depends on the type of delegation, incentive versus instructive, the possibility of repetition, and the probability of observability.

PD May 1993. **TI** Unobserved Delegation.

AU Fershtman, Chaim; Kalai, Ehud. **AA** Fershtman: Tel Aviv University and Northwestern University. Kalai: Northwestern University. **SR** Tel Aviv Sackler Institute of Economic Studies: 10/93; Department of Economics, Tel Aviv University, Ramat Aviv, ISRAEL. **PG** 18. **PR** no charge. **JE** C72, C78, L22. **KW** Observability. Repetition. Commitment.
AB See other entry.

Fiebig, Denzil
TI Estimating End-Use Demand: A Bayesian Approach. **AU** Bauwens, Luc; Fiebig, Denzil; Steel, Mark.

Fischer, Jeffrey H.
PD February 1993. **TI** Product Variety and Consumer Search. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 201; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 16. **PR** no charge. **JE** D83, D11, L13. **KW** Search Theory. Product Differentiation. Imperfect Information.
AB Previous work on consumer search has shown that consumers facing positive search costs do not sample more than one firm; that is, no search occurs in equilibrium. This result, as well as the price charged, is independent of the magnitude of search costs. I develop a model in which consumers search for a most-preferred variety of a heterogeneous product. If products are sufficiently differentiated, consumers will sample additional firms and, consequently, search costs affect both the price charged and the probability of search.

Fisher, Anthony C.
PD May 1993. **TI** Assessing Climate Change Risks: Valuation of Effects. **AU** Fisher, Anthony C.; Hanemann, W. Michael. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics Working Paper: 628 Rev.; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 31. **PR** $10.50. **JE** Q20, D61. **KW** Global Warming. Agriculture.
AB Other papers have discussed and documented the many and varied impacts of projected global warming - and the uncertainties about the importance of the impacts. It will be the purpose of this paper to speculate about some of the implications for economic valuation. Our emphasis will be on ways of thinking about and dealing with major impacts, even, or perhaps especially, where there remains disagreement about magnitude and timing. We are not necessarily coming down on the side of those who foresee the gravest impacts. Rather, the question we wish to address is, what if they are right? What are the implications for valuation?.

Fleurbaey, M.
PD April 1993. **TI** Optimal Growth and Transfers Between Generations. **AU** Fleurbaey, M.; Michel, Philippe. **AA** Fleurbaey: INSEE. Michel: Universite de Paris I. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9324; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris Cedex 14, FRANCE. **PG** 17. **PR** no charge. **JE** D63, D91, D92. **KW** Utilitarianism. Golden Rule.
AB Given the difficulties of utilitarian and egalitarian social

welfare functions in the context of intergenerational equity, an analysis directly based on the potential transfers that can be made between generations is proposed. A consumption path may be rejected if some transfers with infinite returns can be made. It is shown that such potential transfers are unlikely in the short run in ordinary growth models, but that the returns to sacrifice are often unbounded when distant dates are considered, except in some particular cases. These concepts help select acceptable growth paths, and give some insight into the dilemmas of intergenerational justice.

PD May 1993. **TI** Three Solutions for the Compensation Problem. **AA** INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9321; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris Cedex 14, FRANCE. **PG** 18. **PR** no charge. **JE** D63. **KW** Fair Division. Claims.
AB A model of fair division in which differential claims are grounded in talents and handicaps is studied, and a characterization of three solutions is provided. The first two solutions, conditional equality and egalitarian-equivalence, display dual properties. The consistency axiom is shown to have strong consequences in this setting.

Fluck, Zsuzsanna
PD May 1993. **TI** Takeovers, Cash Compensation Policy and the Ownership Structure of Corporations: A Theory of Corporate Control. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 138; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544-1021. **PG** 41. **PR** $3.00 for U.S. mailings. $6.00 for foreign mailings. **JE** G32, G34, G35. **KW** Corporate Control. Dividend Policy. Proxy Fights.
AB This paper analyzes the dynamics of the interaction between internal control and outside equityholders from the corporate control perspective. It is proposed here that dividends are side-payments from the internal control shareholders to the outside shareholders to keep the outsiders from challenging the control of the internal control shareholders by initiating a proxy fight to remove the internal control shareholders from their control position. The model has two phases. There is a trading-phase with a rational expectation model of security markets and tender offers followed by a dynamic game model of a corporate phase in which payout policies and proxy fights are decided. The main results are that 1) when the cost of capital is very low then all corporations are of public ownership with the majority shares held by outsiders. 2) Following an unanticipated jump in the real cost of capital, buyouts occur as a move of preemption, and internal control shareholders realize a gain from the buyouts at the expense of the remaining shareholders.

PD May 1993. **TI** The Predictability of Stock Returns and the Efficient Market Hypothesis. **AU** Fluck, Zsuzsanna; Malkiel, Burton G.; Quandt, Richard E. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 139; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544-1021. **PG** 28. **PR** $3.00 for U.S. mailings. $6.00 for foreign mailings. **JE** G12, G14. **KW** Market Efficiency. Return Predictability. Portfolio Simulation.
AB Empirical work in finance during the 1980's has isolated a number of factors that appear to predict future common stock returns with considerable reliability. This paper analyzes the findings of return predictability with tests that differ from previous work in four respects: 1) Our work covers a period up through mid-1992, a period outside of the sample over which the apparent predictabilities have been documented. 2) Our tests are cross-sectional over time, whereas many of the previous studies were solely time series analyses. 3) We take special care to guard against "data-mining". 4) We set up portfolio simulations with appropriate transaction charges to test for unexploited arbitrage opportunities. We found that some simple portfolio rules such as purchasing low price/earnings, low price/book value, low market capitalization stocks produced sizable excess returns after adjusting for risk.

Forges, Francoise
PD March 1993. **TI** Five Legitimate Definitions of Correlated Equilibrium in Games with Incomplete Information. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9309; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 29. **PR** not available. **JE** C73, D82. **KW** Bayesian Rationality. Imperfect Information.
AB Aumann (1987)'s theorem shows that correlated equilibrium is an expression of Bayesian rationality. We extend this result to games with incomplete information. First, we rely on Harsanyi (1967)'s model and represent the underlying multiperson decision problem as a fixed game with imperfect information. We survey four definitions of correlated equilibrium which have appeared in the literature. We show that these definitions are not equivalent to each other. We prove that one of them fits Aumann's framework; the "agents normal form correlated equilibrium" is an expression of Bayesian rationality in games with incomplete information. We also follow a "universal Bayesian approach" based on Mertens and Zamir (1985)'s construction of the "universal beliefs space". Hierarchies of beliefs over independent variables (states of nature) and dependent variables (actions) are then constructed simultaneously.

Frankel, Jeffrey A.
PD April 1993. **TI** Trade Blocs and Currency Blocs. **AU** Frankel, Jeffrey A.; Wei, Shang-Jin. **AA** Frankel: University of California, Berkeley and National Bureau of Economic Research. Wei: Harvard University. **SR** National Bureau of Economic Research Working Paper: 4335; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** $5.00. **JE** F14, F15, F31. **KW** Exchange Rates. Trade Diversion.
AB Using the gravity model to examine bilateral trade patterns throughout the world, we find clear evidence of trading blocs in Europe, the Western Hemisphere, East Asia and the Pacific. In Europe, it is the EC that operates as a bloc, not including EFTA. Two EC members trade an extra 55 per cent more with each other, beyond what can be explained by proximity, size, and GNP/capita. We also find slight evidence of trade-diversion in 1990. Even though the blocs fall along natural geographic lines, they may actually be "super-natural." Turning to the possibility of currency blocs, we find a degree of intra-regional stabilization of exchange rates, especially in Europe. We also find some tentative cross-section evidence that bilateral exchange rate stability may have a (small) effect on trade.

Franks, Julian R.

PD March 1993. **TI** A Comparison of Financial Recontracting in Workouts and Chapter 11 Reorganizations. **AU** Franks, Julian R.; Torous, Walter N. **AA** Franks: London Business School. Torous: University of California, Los Angeles. **SR** Centre for Economic Policy Research, European Science Foundation, Working Paper: 26; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, England. **PG** 22. **PR** not available. **JE** G34, G33, G32. **KW** Bankruptcy. Corporate Finance.
AB This paper investigates the financial recontracting of firms in workouts and Chapter 11 reorganizations. The terms of recontracting include the medium of exchange used to redeem defaulted securities, the writedown of creditors claims, and deviations from absolute priority experienced by different creditor classes as well as equity holders. An examination of the terms of reorganization agreed by creditors shows that deviations in favor of equity holders are small in Chapter 11 reorganizations, averaging 2.3% of the value of the reorganized firms, compared with 9.5% in informal reorganizations. The willingness of creditors to offer more to equity holders suggests that the formal reorganization process is substantially more costly.

Franses, Philip Hans

PD May 1993. **TI** The Effects of Additive Outliers on Tests for Unit Roots and Cointegration. **AU** Franses, Philip Hans; Haldrup, Niels. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1993-12; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 12. **PR** no charge. **JE** C22, C12, C32. **KW** Spurious Stationarity. Dickey-Fuller Test.
AB This paper discusses the properties of the univariate Dickey-Fuller test and the Johansen test for the cointegrating rank when there exist additive outlying observations in the time series. We provide analytical as well as numerical evidence that additive outliers may produce spurious stationarity. Hence the Dickey-Fuller test will too frequently reject a unit root and the Johansen test will indicate too many cointegrating vectors. Through an empirical example we show how dummy variables can be used to remove this caveat.

Frazis, Harley

PD April 1992. **TI** Wages, Family Background, and Endogenous Schooling. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 225; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 31. **PR** no charge. **JE** J31, C35. **KW** Selection Bias. Education. Wage Determination.
AB This paper assesses the effect of family background on wages in a model with endogenous college attendance, using data from the National Longitudinal Survey of Youth. Previous models of earnings and endogenous education have excluded family background variables to secure identification, though it has been recognized that this is problematic (see Willis and Rosen, (1979)). Identification is secured here by aggregate variables such as state average tuition and the state unemployment rate at age 19. Both the traditional "Heckit" selection-bias correction and an extension due Newey (1991) are estimated. The traditional exclusion restrictions appear unjustified for those who do not attend college.

Freeman, Richard B.

TI Evaluating the Connection Between Social Protection and Economic Flexibility. **AU** Blank, Rebecca M.; Freeman, Richard B.

Fuhrer, Jeffrey C.

PD May 1993. **TI** Monetary Policy and the Behavior of Long-Term Real Interest Rates. **AU** Fuhrer, Jeffrey C.; Moore, George R. **AA** Fuhrer: Federal Reserve Bank of Boston. Moore: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-16; C/O Stephen A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 25. **PR** no charge. **JE** E43, E52. **KW** Lucas Critique. Inflation Adjustment.
AB Real output is strongly correlated with the short-term nominal rate of interest. However, standard models of aggregate demand suggest that real output should be correlated with an expected long-term real rate of interest. We argue that the observed output-nominal rate correlation is an artifact of monetary policy. The systematic behavior of monetary policy, in combination with sluggish inflation adjustment and a structural IS curve that relates output to the rationally expected long-term real rate looks like the short-term nominal rate. Thus the statistical correlation between the nominal rate and output arises in the interaction of monetary policy with the rest of the macroeconomy; it is not a structural relationship that policy is free to exploit.

PD May 1993. **TI** Inflation Persistence. **AU** Fuhrer, Jeffrey C.; Moore, George R. **AA** Fuhrer: Federal Reserve Bank of Boston. Moore: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-17; C/O Stephen A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 29. **PR** no charge. **JE** E31, E52, L14. **KW** Nominal Contracts. Interest Rates. Monetary Policy.
AB This paper demonstrates that the conventional Phelps-Taylor model of overlapping nominal price contracts is not consistent with the dynamic interaction of inflation, interest rates, and output that we find in the data. We present a new contracting model, in which agents negotiate nominal contracts in real terms rather than nominal terms, that is data-consistent. Having formally rejected the nominal contracting model as inconsistent with the data, we perform a battery of policy experiments designed to explore the properties of the real contracting model under alternative monetary policies.

Funkhouser, Edward

PD January 1993. **TI** The Decline in Immigrant Labor Market Skills: Did It Continue in the 1980's? **AU** Funkhouser, Edward; Trejo, Stephen J. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 1-93 ; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 20. **PR** no charge. **JE** J61, J24, F22. **KW** Immigration. Human Capital.
AB Using data from special supplements to the Current Population Survey, this paper tracks the education and hourly earnings for recent male immigrants to the United States. In terms of these measures of labor market skills, immigrants who came in the late 1980's are more skilled than those who arrived earlier in the decade. This represents a break from the steady

decline in immigrant skill levels that took place from 1940-80. The skill improvement that occurred over the 1980's is partly attributable to surprising changes in the national origin composition of U.S. immigration flows.

Gabszewicz, Jean J.
TI   Comparative   Advantage   Under   Oligopoly.
AU   Cordella, Tito; Gabszewicz, Jean J.

Gagnon, Joseph E.
TI   Market Share and Exchange Rate Pass-Through in World Automobile Trade. AU   Feenstra, Robert C.; Gagnon, Joseph E.; Knetter, Michael M.

Galbis, Vicente
PD   April 1993. TI   Experience with Floating Interbank Exchange Rate Systems in Five Developing Economies. AA   International   Monetary   Fund.   SR   International Monetary Fund Working Paper: WP/93/36; International Monetary Fund, Washington, DC 20431. PG   28. PR   not available. JE   O16, G21, F31, O57. KW   Exchange Rates. Banks.
AB   This paper reviews the experience with floating interbank exchange rate systems in five developing countries--Gambia, Guyana, Jamaica, Nigeria and Sri Lanka--and draws some conclusions about the stability and efficiency of these systems. The experience of these countries illustrates both the difficulties and the advantages of interbank exchange rate markets. The main conclusion is that these markets can operate relatively well with a minimum banking infrastructure, provided that the authorities remove legal and institutional impediments to the free operation of these markets including, in particular, exchange restrictions. Any residual restrictions that may remain will likely give rise to the continued existence of parallel markets.

Gandal, Neil
TI   Equilibrium Foreclosure and Complementary Products.
AU   Church, Jeffrey; Gandal, Neil.

Gann, L. H.
PD   May   1993.   TI   Aspects   of   Euro-American Cooperation. AU   Gann, L. H.; Widmaier, Hans Peter; Elbe, Frank. AA   Gann: Stanford University. Widmaier: University of Regensburg. Elbe: Ministry of Foreign Affairs, Bonn. SR   Stanford Hoover Institute International Studies Working Paper: I-93-11; The Hoover Institution, Stanford University, Stanford, CA 94305. PG   55. PR   no charge. JE   F02, F01. KW   Reform. Communist Collapse.
AB   Nothing has altered the world so much as the disappearance of the East-West confrontation. We say we have overcome the division of Europe, but in fact all we have overcome so far is its political division. The continent remains divided into zones of stability and instability, zones of prosperity and of economic under-development, zones of peace and armed conflict. The new dangers are no longer primarily of a military nature. They are now mass migration as a consequence of political and economic despair, refugees from war zones and uncontrollable military machineries. I draw two conclusions from all this. The first is that we must adapt mentally to the changed situation, the second that we need to develop a broader concept of security. Today security has for the most part a non-military dimension. Security is more than mere protection from war. The threats to stability in the largely interdependent world of the nineties will have another, a much more complex, dimension.

Garratt, Rod
PD   November 1992. TI   Public Finance of Private Goods: The Case of Higher Education. AU   Garratt, Rod; Marshall, John M. AA   University of California, Santa Barbara. SR   University of California at Santa Barbara Department of Economics Working Paper: 18-92; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. PG   28. PR   no charge. JE   H42, I22, L14. KW   Lotteries. Contract Theory. Educational Finance.
AB   We provide a contract theory of educational finance in which voluntary participation in the contract derives from consumer's willingness to participate in a lottery to determine their consumption of the indivisible, expensive private good, higher education. Important feature of educational finance (fees, taxes and admissions) are explained as terms of the optimal contract. In addition we address how the optimal contract should change in response to a change in permanent income.

Geoghegan, Jacqueline
TI   A   Regional,   Environmental,   Computable   General Equilibrium Model of the Los Angeles Basin. AU   Robinson, Sherman; Subramanian, Shankar; Geoghegan, Jacqueline.

Gerard-Varet, Louis-Andre
TI   General   Equilibrium   Concepts   Under   Imperfect Competition: A Cournotian Approach. AU   d'Aspremont, Claude; Dos Santos, Ferreira R.; Gerard-Varet, Louis-Andre.

TI   Moral Hazard in Teams and Repeated Partnership: The Role of Information Quality. AU   d'Aspremont, Claude; Gerard-Varet, Louis-Andre.

Gertler, Mark
PD   February 1993. TI   Monetary Policy, Business Cycles and the Behavior of Small Manufacturing Firms. AU   Gertler, Mark; Gilchrist, Simon. AA   Gertler: New York University. Gilchrist: Board of Governors of the Federal Reserve System. SR   Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-4; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. PG   30. PR   no charge. JE   E52, G32, E22, E51. KW   Credit Market Imperfections.
AB   We present evidence on the cyclical behavior of small versus large manufacturing firms, and on the response of the two classes of firms to monetary policy. Our goal is to take a step toward quantifying the role of credit market imperfections in the business cycle and in the monetary transmission mechanism. Our results indicate that small firms contract substantially relative to large firms after tight money. The difference between small and large firm behavior accounts for a significant portion of both the overall decline in manufacturing sales and the overall decline in manufacturing inventories. Finally, we show that the differential effect of tight money on small firms is asymmetric over the cycle, stronger in bad times than in good times. Overall, the broad array of facts we present is compatible with the theories that emphasize financial propagation mechanisms.

PD   February 1993. TI   The Role of Credit Market

Imperfections in the Monetary Transmission Mechanism: Arguments and Evidence. **AU** Gertler, Mark; Gilchrist, Simon. **AA** Gilchrist: Board of Governors of the Federal Reserve System. Gertler: New York University. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-5; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 22. **PR** no charge. **JE** E52, G21, G32, E51. **KW** Monetary Policy. Credit Channels.
AB Recently, a debate has resurfaced on whether and how credit market imperfections may play a role in the transmission of monetary policy. This new literature attempts to identify the effects of credit market imperfections by analyzing the response to tight money of different forms of credit and different types of borrowers. Our paper reviews the arguments and evidence in this literature, and presents some new evidence as well. There is a striking difference in the response of credit flows to small borrowers (consumers and small firms) versus large borrowers, potentially consistent with the view that credit market imperfections help propagate the impact of monetary policy. Specifically, using Flow of Funds data to disaggregate bank assets, we find that consumer and real estate loans contract after tight money but that commercial and industrial loans barely respond. We then disaggregate business loans using data from the manufacturing sector and find that after tight money, loans to small firms contract relative to loans to large firms.

PD February 1993. **TI** The Cyclical Behavior of Short Term Business Lending: Implications for Financial Propagation Mechanisms. **AU** Gertler, Mark; Gilchrist, Simon. **AA** Gertler: New York University. Gilchrist: Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-6; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 9. **PR** no charge. **JE** E52, G21, E51, E32. **KW** Monetary Policy. Bank Lending. Credit Channels.
AB Conventional wisdom holds that tightening of monetary policy should reduce bank lending. It is surprisingly difficult, however, to find convincing time series evidence to support this basic prediction of macroeconomic theory. This paper reexamines the bank lending puzzle. The objective is to explore the consequences for the relationship between monetary policy, credit flows and business cycles. Our punch lines are two: First, primarily responsible for the sluggish response of bank lending to tight money is the the behavior of business credit. Second, there is an interesting heterogeneity in the behavior of short term business credit to large versus small firms. While short term lending to large firms rises in the wake of tight money, short term lending to small firms contracts.

Ghosh, Atish R.
PD April 1993. **TI** Do Capital Flows Reflect Economic Fundamentals in Developing Countries? **AU** Ghosh, Atish R.; Ostry, Jonathan D. **AA** Ghosh: Princeton University. Ostry: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/34; International Monetary Fund, Washington, DC 20431. **PG** 21. **PR** not available. **JE** F32, F41, F47. **KW** Consumption Smoothing. Capital Flows.
AB This paper proposes a methodology for testing whether capital flows to developing countries are determined by economic fundamentals or by purely speculative forces. We use the intertemporal optimizing approach to current account

determination as our benchmark for judging the behavior of capital flows. According to this approach, capital flows should act as a buffer to smooth consumption in the face of temporary shocks to national cash flow, defined as output less investment less government expenditures. The results are encouraging. For a large sample of developing countries, economic fundamentals are indeed found to be the most important determinant of capital flows.

Ghoshal, Sumantra
PD not available. **TI** Diversifiction and Diversifact. **AU** Ghoshal, Sumantra; Mintzberg, Henry. **AA** Ghoshal: INSEAD. Mintzberg: McGill University, Montreal. **SR** INSEAD Working Papers: 92/75/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 22. **PR** not available. **JE** M11, L22. **KW** Diversification. Management.
AB What a difference an "a" makes! Drop the letter from the word diversification, as a secretary of ours once did, and it comes out as diversifiction. There is much fiction about the management of multi-business enterprises, as there are some facts. Sorting out the facts from the fiction is a major challenge for many large corporations, as they try to find the elusive balance among a diverse set of conflicting needs. In this article we present a new model designed to shift the debate on the mangement of multibusiness firms from re-arrangement of boxes on charts to consideration of the organizational capabilities that are necessary for managing diversity and how they can be developed.

Gilboa, Itzhak
PD April 1993. **TI** Case-Based Optimization. **AU** Gilboa, Itzhak; Schmeidler, David. **AA** Gilboa: Northwestern University. Schmeidler: Tel Aviv University and Ohio State University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1039; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. **PG** 17. **PR** $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. **JE** D81, C61, D83. **KW** Decision Theory. Learning. Updating.
AB Case-Based Decision Theory (CBDT) suggest that decisions under uncertainty are made by analogies to previously-encountered problems. It gives rise to the concept of "aspiration level" in the following sense: if this level is attained by some acts, the decision maker will only choose among them, and will not even experiment with others. In this paper we discuss the process by which the aspiration level is updated. An adjustment rule is "realistic" if the aspiration level is (almost always) set to be an average of its previous value and the best average-performance so far encountered. It is "ambitious" if at least one of the following holds: (i) the initial aspiration level is set at a high level, or (ii) the aspiration level is set to exceed the maximal average performance by some constant infinitely often. We focus here on the case in which the decision maker is repeatedly faced with the "same" problem. Case-based decision makers who are both ambitious and realistic will "learn" to be expected-utility maximizers, provided that the decision problem is repeated long enough.

PD May 1993. **TI** Hempel, Good and Bayes. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and

Management Science Discussion Paper: 1045; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. **PG** 22. **PR** $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. **JE** C11, D81. **KW** Hempel's Paradox. Bayesian Analysis. Beliefs.
AB This paper analyzes some decision/belief paradoxes from a Bayesian viewpoint, focusing on Hempel's "paradox of confirmation" and Good's variation of it. It is shown that a straightforward Bayesian analysis resolves the paradoxes discussed. These example are used to support the view that what the Bayesian paradigm does best is to provide a coherent and intuitive representation of belief.

Gilchrist, Simon
TI Monetary Policy, Business Cycles and the Behavior of Small Manufacturing Firms. **AU** Gertler, Mark; Gilchrist, Simon.

TI The Role of Credit Market Imperfections in the Monetary Transmission Mechanism: Arguments and Evidence. **AU** Gertler, Mark; Gilchrist, Simon.

TI The Cyclical Behavior of Short Term Business Lending: Implications for Financial Propagation Mechanisms. **AU** Gertler, Mark; Gilchrist, Simon.

PD February 1993. **TI** Evidence on the Role of Cash Flow for Investment. **AU** Gilchrist, Simon; Himmelberg, Charles P. **AA** Gilchrist: Federal Reserve Board. Himmelberg: New York University. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-7; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 16. **PR** no charge. **JE** E22, C23. **KW** Investment Models. Panel Data.
AB This paper develops an empirical framework for interpreting the reduced-form coefficients from investment models estimated with panel data. The methodology employed is similar to Abel and Blanchard (1986), and is motivated by a number of intriguing regularities documented by empirical investigations of reduced-form investment models. In particular, we attempt to determine the extent to which the well documented correlation between cash flow and investment can be attributed to its ability to predict the future marginal profitabilty of capital, versus its role as an explanator due to financing constraints.

Gizycki, Marianne C.
TI Explaining Forward Discount Bias: Is It Anchoring? **AU** Gruen, David. W. R.; Gizycki, Marianne C.

Glazer, Jacob
PD May 1993. **TI** Simplicity of Solution Concepts: Subgame Perfect Equilibrium in Extensive Games vs. Iteratively Undominated Strategies in Normal Games. **AU** Glazer, Jacob; Rubinstein, Ariel. **AA** Glazer: Tel Aviv University and Boston University. Rubinstein: Tel Aviv University and Princeton University. **SR** Tel Aviv Sackler Institute of Economic Studies: 9/93; Department of Economics, Tel Aviv University, Ramat Aviv, ISRAEL. **PG** 14. **PR** no charge. **JE** C72. **KW** Extensive Form. Game Theory.
AB An extensive game form is often viewed as a description of the physical order of moves in an interactive situation. We

claim, however, that it can also be viewed as a guideline for calculating the Iteratively Undominated Strategies (IUS) in normal form games. It is shown that the IUS of a solvable normal game can be calculated using the Subgame Perfect Equilibrium of an appropriate extensive form game. This method is simpler than the standard IUS calculation since the extensive game provides additional information on the order of elimination. As a by-product, we conclude that implementation by Subgame Perfect Equilibrium of an extensive game is equivalent to implementation through a solution concept which we call Guided Iteratively Undominated Strategies which requires a uniform order of elimination.

Glick, Reuven
PD April 1993. **TI** Global versus Country-Specific Productivity Shocks and the Current Account. **AU** Glick, Reuven; Rogoff, Kenneth. **AA** Glick: Federal Reserve Bank of San Francisco. Rogoff: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 443; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. **PG** 29. **PR** no charge. **JE** F32, E22. **KW** Investment. Current Account.
AB For G-7 countries over the period 1961-1990, there appears to be a strong and stable negative correlation between annual changes in the current account and investment. Here we explore this correlation using a highly tractable empirical model that distinguishes between global and country-specific shocks. An apparent puzzle, however, is that the current account seems to respond by much less than investment to country-specific productivity shocks. Given the near random *walk behavior of these shocks, this observation would appear to* contradict a central cross-equation inequality restriction implied by the intertemporal approach. We show analytically, however, that the theoretically-predicted current account response can be extremely sensitive to small changes in the degree of mean reversion in country-specific productivity; in general, the current account response is more sensitive than is the investment response. Our results thus support the view that there is a significant convergent component to country-specific productivity shocks.

Gokhale, Jagadeesh
TI The Equity of Social Services Provided to Children and Senior Citizens. **AU** Kotlikoff, Laurence; Gokhale, Jagadeesh.

Goldberg, Linda S.
PD April 1993. **TI** Departures from the Ruble Zone: The Implications of Adopting Independent Currencies. **AU** Goldberg, Linda S.; Ickes, Barry W.; Ryterman, Randi. **AA** Goldberg: New York University and National Bureau of Economic Research. Ickes: Pennsylvania State. Ryterman: The World Bank. **SR** New York University Economic Research Report: 93-17; New York University, Faculty of Arts and Science, Department of Economics, 269 Mercer Street Washington Square, New York, N.Y. 10003. **PG** 29. **PR** no charge. **JE** F31, F36, P52, F41, E42. **KW** Former Soviet Union. Exchange Rates. Output Stabilization.
AB In this paper, we analyze the consequences for countries of the former Soviet Union (FSU) of departing from the ruble zone. Traditional arguments for independent currencies -- in

particular, the potential role of the exchange rate for output stabilization -- currently do not apply to countries of the FSU. This fact would seem to weaken the case for departures from the ruble zone. However, using arguments derived from the public-finance literature, we show that departures from the ruble zone have important implications for the pace and direction of continued economic reforms across the FSU. Moreover, we argue that adopting an independent currency can be an important device for signaling radical economic reform. These public-finance and signaling arguments suggest that radical reformers should adopt independent currencies.

TI Investment in Manufacturing, Exchange-Rates and External Exposure. **AU** Campa, Jose; Goldberg, Linda S.

Goldman, Steven M.
PD May 1993. **TI** Nonparametric Multivariate Regression Subject to Constraint. **AU** Goldman, Steven M.; Ruud, Paul A. **AA** University of California, Berkeley. **SR** University of California at Berkeley Working Paper in Economics: 93-213; IBER, 156 Barrows Hall, University of California, Berkeley, CA 94720. **PG** 14. **PR** $3.50 U.S.A. and Canada. $7.00 foreign. **JE** C14, C51. **KW** Constrained Estimation. Quadratic Programming.
AB We review Hildreth's algorithm for computing the least squares regression subject to inequality constraints and Dykstra's generalization. We provide a geometric proof of convergence and several enhancements to the algorithm and generalize the application of the algorithm from the convex cones to convex sets.

Gorton, Gary
TI Arbitrage Chains. **AU** Dow, James; Gorton, Gary.

TI Profitable Informed Trading in a Simple General Equilibrium Model of Asset Pricing. **AU** Dow, James; Gorton, Gary.

Gosling, Amanda
TI What Has Happened to Union Recognition in Britain?
AU Disney, Richard; Gosling, Amanda; Machin, Stephen.

Gourieroux, Christian
TI Modeles Statistiques de Valorisation par Arbitrage.
AU Clement, E.; Gourieroux, Christian; Monfort, A.

PD March 1993. **TI** Choix de Portefeuille dans un Environnement d'Investissement Desagrege: le Cadre Statique. **AU** Gourieroux, Christian; Jouneau, F. **AA** Gourieroux: INSEE and CEPREMAP. Jouneau: INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9308; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 27. **PR** no charge. **JE** G11, G10. **KW** Portfolio Choice. Asset Markets. CAPM.
AB We study the impact of the disaggregation of a risky asset market into distinct investment sectors. We characterize the optimal portfolio choice among each sector, the geometry of efficient frontiers, and derive a decomposition of the global Sharpe performance in terms of direct and residual performance. This framework is applied to the theory of portfolio choice in the presence of investment constraints.

TI Covariance Estimators and Adjusted Pseudo Maximum Likelihood Method. **AU** Broze, Laurence; Gourieroux, Christian.

PD April 1993. **TI** Contrats d'Assurance Chomage sur Prets Immobiliers: Etude Descriptive et Valorisation du Portefeuille. **AA** CREST and CEPREMAP. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9323; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris Cedex 14, FRANCE. **PG** 21. **PR** no charge. **JE** G11, G22, J65, G21. **KW** Unemployment Insurance. Mortgages.
AB We consider mortgages including the possibility of an unemployment insurance. The insurance company pays the cash-flows of the credit as soon as the credit demander becomes unemployed for a maximal number of payments fixed in the contract. We develop a probabilistic model for describing the cash-flows paid by the company. We jointly take into account the unemployment, job search and prepayment phenomena. With such a model it is possible to study the probabilistic properties of the cash-flow pattern, as a function of the age of the credit. Finally we discuss the estimation of the parameters of such a model, and its use as a basis for pricing the insurance contract. The paper is written in French.

Graddy, Kathryn
PD April 1993. **TI** Testing for Imperfect Competition at the Fulton Fish Market. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 137; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544-1021. **PG** 27. **PR** $3.00 for U.S. mailings. $6.00 for foreign mailings. **JE** D43, L13, L81. **KW** Market Power. Race Discrimination.
AB This paper reports the results of a study of the prices paid by individual buyers at the Fulton Fish Market in New York City. In principle, this is a highly competitive market in which there should be no predictable price differences across customers who are equally costly to service. The results indicate that buyers who are equally costly to service pay different prices for fish of identical quality, which is inconsistent with the model of perfect competition. For example, Asian buyers pay 7% less for whiting than do white buyers. To explain these price anomalies I propose and implement a method for estimating the degree of market power in industries with separable markets.

Grandmont, Jean-Michel
PD February 1993. **TI** Behavioral Heterogeneity and Cournot Oligopoly Equilibrium. **AA** CEPREMAP and Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1044; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 24. **PR** no charge. **JE** L13, D43. **KW** Imperfect Competition. Aggregation.
AB It is not unfrequent to see studies of imperfect competition or of industrial organization rest upon questionable foundations such as the hypothesis that inverse market demand is, whenever it is positive, concave or even linear. Assumptions of this sort are not robust (i.e. "additive") in the sense that they are not usually preserved through aggregation of different sectors that would satisfy them individually. The present paper investigates an alternative specification that is based upon the plausible existence of significant heterogeneities among demanders. It is demonstrated that specific forms of demand heterogeneity tend to stabilize market expenditures. In a partial equilibrium context, sufficient demand heterogeneity is shown to imply existence and unicity of a Cournot oligopoly

equilibrium.

Grant, Simon
PD May 1993. TI A Cardinal Characterization of the Rubinstein-Safra-Thomson Axiomatic Bargaining Theory. AU Grant, Simon; Kajii, Atsushi. AA Grant: University of Melbourne. Kajii: University of Pennsylvania. SR University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-18; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. PG 13. PR no charge. JE C78, D81. KW Non-Expected Utility. Ordinal Bargaining Problem.

AB The purpose of this paper is to demonstrate that the scope of the Rubinstein-Safra-Thomson axiomatic (ordinal) bargaining theory can be extended to a wider family of non-expected utility preferences than considered by RST. Moreover, we show that for this broader class of preferences there is a natural way to translate an ordinal bargaining problem into a cardinal bargaining problem. RST's preference based axioms for the solution of an ordinal bargaining problem are shown to be equivalent to the original Nash axioms for the corresponding solution of the induced cardinal bargaining problem and hence characterize the ordinal Nash solution for this family of preferences. Although broader, we note that members of this family of preferences cannot accommodate the well-documented violation of expected utility referred to as the common ratio effect.

Gray, Wayne B.
PD April 1993. TI Environmental Regulation and Manufacturing Productivity at the Plant Level. AU Gray, Wayne B.; Shadbegian, Ronald J. AA Gray: Clark University and National Bureau of Economic Research. Shadbegian: U.S. Bureau of the Census. SR National Bureau of Economic Research Working Paper: 4321; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 18. PR $5.00. JE Q28, D24. KW Pollution Abatement. Compliance Costs.

AB We analyze the connection between productivity, pollution abatement expenditures, and other measures of environmental regulation for plants in three industries (paper, oil, and steel). We examine data from 1979 to 1985, considering both labor and total factor productivity, both levels and growth rates, and both annual measures and averages over the period. We find a strong connection between regulation and productivity when regulation is measured by compliance costs. More regulated plants have significantly lower productivity levels and slower productivity growth rates than less regulated plants. The magnitude of the impacts are larger than expected: a $1 increase in compliance costs appears to reduce TFP by the equivalent of $3 to $4. Thus, commonly used methods of calculating the impact of regulation on productivity are substantially underestimated.

Green, Richard K.
PD April 1993. TI Demographic Factors and Real House Prices. AU Green, Richard K.; Hendershott, Patric H. AA Green: University of Wisconsin. Hendershott: Ohio State University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4332; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR $5.00. JE R21, R31, J11. KW Willingness to Pay. Housing.

AB Real house prices are directly determined by the willingness of households to pay for (and willingness of builders to supply) a constant-quality house. Changes in the quantity of housing demanded will affect real prices only to the extent that the long-run housing supply schedule is positively sloped. In this paper we use 1980 census data to measure the impact of the age structure and real income per household on the willingness of households to pay for a constant quality house. Extrapolating these variables forward to 2010, we conclude that evolving demographic forces are likely to raise real house prices, not lower them.

Grilo, Isabel
PD December 1992. TI Mixed Duopoly under Vertical Differentiation. AA Universite Catholique de Louvain. SR Universite Catholique de Louvain CORE Discussion Paper: 9261; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 15. PR not available. JE L13, D43, D21. KW Duopoly. Vertical Differentiation.

AB In this paper we study a vertically differentiated duopoly market with a profit maximizing firm (private firm) and a total surplus maximizing firm (public firm). The technological conditions are assumed identical for both firms and are described by unit costs which are constant with respect to quantity, though increasing in quality. No specific form is given to the relation between unit costs and quality. We prove that the socially optimal solution can be sustained as a market outcome by using a public firm as a market agent. We also provide conditions on the constant unit cost function under which every market outcome is a social optimum.

Grossman, Gene M.
PD October 1992. TI Trade Wars and Trade Talks. AU Grossman, Gene M.; Helpman, Elhanan. AA Grossman: Princeton University. Helpman: Tel Aviv University and CIAR. SR Princeton Woodrow Wilson School Discussion Paper in Economics: 163; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. PG 39. PR no charge. JE D72, F13. KW Political Pressure. Trade Negotiations.

AB Whether governments clash in trade disputes or negotiate over trade agreements, their actions in the international arena reflect political conditions back home. Previous studies of cooperative and noncooperative trade relations have focused on governments that are immune from political pressures and that act as benevolent servants of the public interest. Here we take a first step toward introducing domestic politics into the analysis of international economic relations. We study the interactions between national leaders who are concerned both with providing a high standard of living to the general electorate and collecting campaign contributions from special interest groups. The analysis reveals the determinants of the structure of protection in a noncooperative trade war and in a cooperative trade agreement.

Grossman, Herschel I.
PD May 1993. TI Rival Kleptocrats: The Mafia versus the State. AA Brown University. SR Brown University Department of Economics Working Paper: 93-27; Department

of Economics, Brown University, Providence, Rhode Island 02912. **PG** 14. **PR** no charge. **JE** H11, D78. **KW** Public Services. Taxation. Organized Crime.

AB The kleptocratic State in imposing taxes and providing public services attempts to maximize political rent. This paper views the Mafia as competing with the State as an alternative provider of public services. The analysis emphasizes that this competition between the Mafia and the State can have both positive and negative effects. Competition causes the State to reduce taxation and to increase provision of public services, and alone would cause an increase in net total production and the welfare of the representative producer. But, if the Mafia's activities are socially disruptive, then the Mafia can threaten the viability of the State and the benefits of competition can be lost.

PD June 1993. **TI** The Profitability of Colonialism. **AU** Grossman, Herschel I.; Iyigun, Murat. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 93-30; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 14. **PR** no charge. **JE** F02, F21. **KW** Colonies. Resource Allocation. Appropriation.

AB This paper develops an analytical framework for studying colonialism from the perspective of neoclassical political economy. The distinguishing feature of colonialism in this model is that the metropolitan government restricts the amount of investment in the colony in order to maximize the net profits earned in the colony. The model also explicitly includes the threat of extralegal appropriative activities by the indigenous population in the colony. The analysis of this model identifies the conditions, where these conditions include both the technology of production and the technology of extralegal appropriation, that determine the profitability of colonialism. The analysis suggests why historically some countries but not others became colonies and why many colonies that were initially profitable subsequently become unprofitable and were abandoned. The model also has implications for the amount of investment, the allocation of resources between productive and appropriative activities, and the distribution of income in colonies.

PD June 1993. **TI** Sovereign Debt and Consumption Smoothing. **AU** Grossman, Herschel I.; Han, Taejoon. **AA** Grossman: Brown University. Han: Sejong Institute. **SR** Brown University Department of Economics Working Paper: 93-31; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 6. **PR** no charge. **JE** H63. **KW** Consumption Smoothing. Debt Servicing.

AB This note shows that, contrary to the claim of Eaton and Gersovitz, without a binding commitment to service debt and without state-contingent debt servicing, a sovereign could not issue a positive amount of uncollateralized debt.

Gruen, David. W. R.

PD January 1993. **TI** Explaining Forward Discount Bias: Is It Anchoring? **AU** Gruen, David. W. R.; Gizycki, Marianne C. **AA** Gruen: Reserve Bank of Australia and Princeton University. Gizycki: Reserve Bank of Australia. **SR** Princeton Woodrow Wilson School Discussion Paper in Economics: 164; Woodrow Wilson School, Robertson Hall, Princeton University, Princeton, NJ 08544. **PG** 27. **PR** no charge. **JE** F31. **KW** Foreign Exchange. Exchange Rate Surveys.

AB Anchoring is a well-documented behavioral pattern which occurs when agents form their expectations of an objective variable by adjusting from some given starting value. We present a model of the foreign exchange market in which there are two types of agents (traders); those who are fully rational and those whose expectations are anchored to the forward exchange rate. Under plausible conditions, a significant proportion of the anchored traders survived in the market in the long-run. The model explains both forward discount bias in the direction consistently observed in foreign exchange markets and the results of surveys of market participant's exchange rate expectations.

Guest, David

PD March 1993. **TI** Industrial Relations in Greenfield Sites. **AU** Guest, David; Rosenthal, Patrice. **AA** Guest: Birkbeck College. Rosenthal: London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 127; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 27. **PR** no charge. **JE** J52, M12, M14, J20. **KW** Employment Relations. Human Resource Management.

AB There is a popular stereotype that at greenfield sites managers practice, and sustain over time, new forms of human resource management and that in doing so they obtain highly positive performance outcomes. A persisting theme in this stereotype is that greenfield sites are characterized by a highly collaborative form of employee relations and that they are largely strike and conflict free. The aim of this paper is to test the stereotype by reviewing what is known about the subject. Existing research on greenfield sites is placed within a broad conceptual framework, key issues are highlighted and gaps in our knowledge identified. The discussion emphasizes the issues of national ownership and industrial relations/human resource practices in foreign-owned firms; how well greenfield sites cope with the aging process; and the industrial relations and human resource outcomes obtained in greenfield sites. The review finds that most research ignores the last two issues.

Guidotti, Pablo E.

TI Financial Development and Economic Growth. **AU** De Gregorio, Jose; Guidotti, Pablo E.

Gupta, Sanjeev

PD March 1993. **TI** Public Expenditure Policy and the Environment: A Review and Synthesis. **AU** Gupta, Sanjeev; Miranda, Kenneth; Parry, Ian. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/27; International Monetary Fund, Washington, DC 20431. **PG** 25. **PR** not available. **JE** Q28, Q38. **KW** Policy Failure. Environmental Regulation.

AB Commonly cited environmental instruments in the legal, regulatory, and fiscal domains are intended primarily to address market failures to ensure that environmental degradation and resource use is contained to appropriate levels. However, in many instances, environmental degradation is rooted not in market failure, but rather in policy failure. This paper identifies areas of public expenditure policy that interact with the environment. It argues that a reform of certain types of subsidies, increased operations and maintenance expenditures, and a thorough environmental assessment of capital projects will tend to benefit the environment, thereby moving an

economy towards "sustainable" development.

Gustman, Alan L.

PD March 1993. **TI** Employer Provided Health Insurance and Retirement Behavior. **AU** Gustman, Alan L.; Steinmeier, Thomas L. **AA** Gustman: Dartmouth College and National Bureau of Economic Research. Steinmeier: Texas Tech University. **SR** National Bureau of Economic Research Working Paper: 4307; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 33. **PR** $5.00. **JE** J32, J22. **KW** Health Benefits. Retirement.
AB This paper analyzes the effects on retirement of employer provided health benefits to workers and retirees. Retiree health benefits delay retirement until age of eligibility, and then accelerate it. With a base case of no retiree health coverage, granting retiree health coverage to all those with employer coverage while working accelerates retirement age by less than one month. Valuing benefits at costs of private health insurance to unaffiliated individuals, rather than at group rates, increases the effect. Ignoring retiree health benefits in retirement models creates only a small bias. Changing health insurance policies has a small effect on retirement.

Haldrup, Niels

TI The Effects of Additive Outliers on Tests for Unit Roots and Cointegration. **AU** Franses, Philip Hans; Haldrup, Niels.

Haliassos, Michael

PD October 1992. **TI** Progressivity of Capital Gains Taxation with Optimal Portfolio Selection. **AU** Haliassos, Michael; Lyon, Andrew B. **AA** University of Maryland. **SR** University of Maryland Department of Economics Working Paper: 92-12; University of Maryland, College Park, MD 20742. **PG** 26. **PR** no charge. **JE** H24, H30, G18, G11. **KW** Capital Gains Tax.
AB We provide the most recent data on capital gains realizations using a five year stratified panel of taxpayers covering 1985-1989. We find, as earlier studies have, that capital gains realizations are very concentrated among the highest income groups. We use these data and data from the Federal Reserve Board Survey of Consumer Finances to draw inferences from a simulation model of the effects on progressivity and efficiency of alternative tax treatment of capital gains.

Hall, Bronwyn H.

PD January 1993. **TI** The Value of Intangible Corporate Assets: An Empirical Study of the Components of Tobin's Q. **AA** Stanford University, University of California, Berkeley and National Bureau of Economic Research. **SR** University of California at Berkeley Working Paper in Economics: 93-207; global IBER, 156 Barrows Hall, University of California at Berkeley, Berkeley CA 94720. **PG** 31. **PR** $3.50 U.S. and Canada, $7.00 foreign. **JE** G12, G31, O32. **KW** R&D Investment. Market Value.
AB The relative stock market valuation of the intangible asset created by R&D investment in U.S. manufacturing firms has fallen from rough equality with ordinary tangible assets during the 1973-1982 period to about twenty to thirty percent of ordinary capital during the 1986-1990 period. At the same time, the relative market valuation of advertising expenditure has risen to parity with R&D spending. This finding is based on

a large comprehensive panel of about 2500 U.S. industrial corporations, covering 80-90 percent of industrial R&D performed by U.S. firms and is robust to industry controls, sample selection, and various specification tests. Possible explanations for the finding are discussed, but definitive answers await future research.

PD January 1993. **TI** R&D Tax Policy During the 1980's: Success or Failure? **AA** University of California at Berkeley, National Bureau of Economic Research, and Stanford University. **SR** University of California at Berkeley Working Paper in Economics: 93-208; IBER, 156 Barrows Hall, University of California at Berkeley, Berkeley CA 94720. **PG** 34. **PR** $3.50 U.S. and Canada, $7.00 foreign. **JE** O31, H25. **KW** Tax Credit. R&D Investment.
AB R&D tax policy in the United States during the 1980's is evaluated, with particular emphasis placed on quantifying the impact of the R&D tax credit on the R&D investment of manufacturing firms. I estimate an average tax price elasticity for R&D spending which is in the neighborhood of unity in the short run. Although the effective credit rate is small (less than five percent until 1990), this relatively strong price response means that the amount of additional R&D spending thus induced was greater than the cost in foregone tax revenue. The recent evolution of features of the U.S. corporate tax system which affect R&D is also reviewed and my results are compared with those of previous researchers. The conclusion is that the R&D tax credit seems to have had the intended effect, although it took several years for firms to fully adjust.

Hall, Robert E.

TI Productivity and the Density of Economic Activity. **AU** Ciccone, Antonio; Hall, Robert E.

Hamada, Koichi

PD January 1993. **TI** Monetary Integration in Historical Perspective. **AU** Hamada, Koichi; Porteous, David. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 680; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven CT 06520. **PG** 34. **PR** $2.00. **JE** F33, F15, N23, N25, E65. **KW** European Monetary Union. Economic Integration.
AB Recent turmoil on European currency markets has caused doubts about the process of European monetary unification. This paper sets these developments in Europe within the historical context of other incidences of monetary integration among the regions of emerging nation states, such as Germany, Italy and Japan in the 19 century and German Economic Monetary and Social Union recently; and monetary unions among existing nation states, such as the Nineteenth Century German, Latin and Scandinavian Monetary Unions, and the contemporary West African Monetary Union and European Monetary System. These historical experiences, which are viewed from the standpoint of incentives of rational agents to participate in a collective action, indicate many economic and political economic difficulties to create a monetary union.

Hamann, A. Javier

PD April 1993. **TI** Private Saving, Public Saving and the Inflation Tax: Another Look at an Old Issue. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/37; International Monetary Fund, Washington, DC 20431. **PG** 13. **PR** not available. **JE** E31. **KW** Inflation Tax.

AB The present paper provides an analytical discussion on a popular issue: the measurement problems associated with the inflation tax. It is well known that conventional national accounts definitions usually misplace the proceeds from the inflation tax: they are typically not subtracted from disposable income, and they are not included as part of the Government's revenues "above the line." Using a simple, perfect foresight monetary model developed by Calvo (1986, 1987), this paper analyzes the difference between macroeconomically relevant concepts of public and private saving, and their national account aggregates create the impression that heavier reliance on the inflation tax on the part of the Government is associated with higher private saving, even in situations where the composition of government revenues does not have any effect on private saving.

Han, Taejoon

TI Sovereign   Debt   and   Consumption   Smoothing.
AU Grossman, Herschel I.; Han, Taejoon.

Hanemann, W. Michael

PD February 1993. **TI**   Projected M&I Demand in the LADWP   Service   Area   1990-2010.   **AA**   University   of California, Berkeley.   **SR**   University   of   California   at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 644; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California,   Berkeley,   CA   94720.   **PG**   7.   **PR** $5.25. **JE**   Q25. **KW** Water Demand. Los Angeles.
AB We analyze municipal and industrial water use in the LADWP service area.

TI   Assessing Climate Change Risks: Valuation of Effects.
AU Fisher, Anthony C.; Hanemann, W. Michael.

Hardy, Daniel C.

PD   April 1993. **TI**   Reserve Requirements and Monetary Management: An Introduction. **AA**   International Monetary Fund.   **SR**   International   Monetary   Fund   Working   Paper: WP/93/35;   International   Monetary   Fund,   Washington,   DC 20431.   **PG**   24.   **PR**   not available.   **JE**   E58,   E52. **KW** Central Banks. Policy Instruments.
AB Reserve requirements are widely used by central banks as a means to improve monetary control, an instrument for policy implementation, a source of revenue, and as safeguard of bank liquidity. The effectiveness of reserve requirements in fulfilling these functions is reviewed, and the detailed modalities of their use are examined. Reserve requirements in a sample of developing countries are described.

Hartwick, John M.

PD   May 1993. **TI**   Financing R&D with Knowledge Stock Rentals. **AA**   Queen's University. **SR**   Queen's Institute for Economic Research Discussion Paper: 881; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG**   12.   **PR** $3.00 + GST Canada; $3.50 U.S. and   Foreign.   **JE**   O33,   O41,   E13.   **KW** Endogenous Growth. Knowledge Stock.
AB We set out an endogenous growth model along the lines of Romer (1990) and investigate the implications of financing new knowledge production (R&D) with rental income accruing to the knowledge stock used in goods production. The knowledge stock is non-public input in goods production. The
balanced growth rate under optimal growth can be greater or less than that under the invest knowledge stock rentals regime. The balanced growth rate in the invest knowledge stock rentals regime depends on the parameters of the production function and not on the parameters of preference.

PD   May 1993. **TI**   (1) National Wealth and NNP. (2) Natural   Resources   and   National   Wealth   and   NNP. **AA**   Queen's   University.   **SR**   Queen's   Institute   for Economic   Research   Discussion   Paper: 884;   Department   of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG**   30. **PR** $3.00 + GST Canada; $3.50 U.S. and Foreign. **JE**   E13, O47, Q20, Q30, Q32. **KW** National Wealth. Capital Stock.
AB (1)   Corresponding   to   current   national   wealth   as discounted future optimal consumption (Weitzman (1976)) we observe   current   national   wealth   to   be   the   value   of   net accumulated stocks of capital. It follows that NNP can be interpreted as interest on national wealth. A constant value of wealth implies no net investment and NNP equals the value of consumption,   the   Hicksian   notion   of   "income".   (2)   We introduce natural resources into competitive dynamic general equilibrium models and examine the concepts of NNP and national wealth which are seen to sustain the efficient paths. This procedure leads to "formulas" for amending traditional statements of NNP in national accounting to allow for natural resource stock depletion and degradation. We consider depletion of exhaustible resource stocks and economic depreciation, pollution stock increase, renewable resource stock decline, and land use change. This later inquiry leads to the appearance of capital gains in NNP. Throughout, we link NNP to the formal notion of national wealth or the value of accumulated capital.

Hayami, Yujiro

PD   February   1993.   **TI**   Induced   Technical   and Institutional   Change   Evaluation   and   Reassessment: Two Chapters.   **AU** Hayami,   Yujiro;   Ruttan,   Vernon   W. **AA**   Hayami: Aoyama Gakuin University. Ruttan: University of   Minnesota.   **SR**   University   of   Minnesota   Economic Development   Center   Bulletin: 93-1;   Department   of Agricultural and Applied Economics, 232 Classroom Office Building,   University   of   Minnesota,   St.   Paul,   MN   55108. **PG**   40. **PR**   no charge. **JE**   O41, O33. **KW** Induced Innovation. Technical Change.
AB In this chapter we first respond to the several criticisms that have been made in our work on induced innovation. We then comment on the suggested new directions for research advanced in the several papers in part three of the volume. Finally we suggest several suggestions for further development of the induced innovation research agenda.

Hechler, Nannette

PD   May 1993. **TI**   Investissement Prive: Effets de la Dette Externe et de l'Investissement Public. **AA**   Universite of Lausanne.   **SR**   Universite   de   Lausanne,   Cahiers   de Recherches Economiques: 9307; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH1 - Dorigny,   CH-1015   Lausanne,   SWITZERLAND.   **PG**   42. **PR**   no charge. **JE**   E22, O11, F34, H63. **KW** Private Investment. Public Investment. Developing Countries.
AB Most of the Developing Countries having experienced a debt-overhang, have seen their private and public investment fall heavily during the 80's. The model presented in this paper

predicts the cases where the fall of private investment is caused by its complementarity with public investment rather than by the debt-overhang. The paper is written in French.

Heckman, James
TI   Determinants of Young Male Schooling and Training Choices. AU   Cameron, Stephen V.; Heckman, James.

Helpman, Elhanan
TI   Trade Wars and Trade Talks. AU   Grossman, Gene M.; Helpman, Elhanan.

Hendershott, Patric H.
TI   Demographic   Factors   and   Real   House   Prices. AU   Green, Richard K.; Hendershott, Patric H.

Henderson, Vernon
PD   April   1993.   TI   Edge   City   Economics. AU   Henderson, Vernon; Mitra, Arindam.   AA   Brown University. SR   Brown University Department of Economics Working Paper: 93-26; Department of Economics, Brown University, Providence, Rhode Island 02912. PG   26. PR   no   charge.   JE   R11,   R12,   R14,   R52,   R53. KW   Location. Suburbanization. Developers.
AB   This paper examines the strategies of an edge city developer optimizing against a passive central city with an historically given capital stock. The edge city developer chooses office space capacity, distance from the central city and employment; and the paper analyzes how these choices change in response to changes in historically given central city capacity. The paper also examines the impact of loosening developer control over capacity and employment and the impact of strategizing against other potential edge city developers. The analysis provides new perspectives on the nature of suburbanization, the impact of developers on the urban landscape, and the basis for the chaos hypothesis in urban analysis.

Hendricks, Kenneth
PD   March 1993. TI   Optimal Selling Strategies for Oil and Gas Leases with an Informed Buyer. AU   Hendricks, Kenneth; Porter, Robert H.; Tan, Guofu. AA   Hendricks and Tan: University of British Columbia. Porter: Northwestern University.   SR   Northwestern   University   Center   for Mathematical Studies in Economics and Management Science Discussion Paper: 1038; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. PG   14. PR $3.00 in U.S. and Canada; $5.00 via international   mail; $2.00   for   local   Northwestern faculty/students. JE   D44, D82. KW   Auctions. Bidding. Asymmetric Information.
AB   In this paper, we study different allocation mechanisms for selling oil and gas leases when there is a single informed neighbor firm and a fixed number of uninformed nonneighbor firms. We show that if the neighbor firm can be excluded from bidding, the government can capture essentially all the rents using a first-price, sealed bid auction. It should set the reserve price and royalty rate equal to zero, and give the neighbor firm an incentive to reveal its information to ensure that the winning firm uses the efficient drilling rule. If the neighbor firm cannot be excluded, the government may have to share some of the rents with the neighbor firm.

Henrotte, Philippe
PD   August 1992.   TI   Existence and Optimality of Equilibria in Markets with Tradeable Derivative Securities. AA   Stanford   University.   SR   Universitat   Bonn Sonderforschungsbereich 303 - Discussion Paper: A-380; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG   37. PR   no charge. JE   G12, G13, D50. KW   Asset Markets. Financial Markets. Price Uncertainty.
AB   We study a financial market with endogenous price uncertainty. Agents trade derivative securities whose payoffs depend on future equilibrium asset prices. We prove that under some properness conditions on the preferences an equilibrium exists and we study its efficiency.

Herber, Bernard P.
PD   December 1992.   TI   International Environmental Taxation in the Absence of Sovereignty. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: 92/104; International Monetary Fund, Washington, DC 20431. PG   25. PR   not available. JE   H23, K33, Q38. KW   International Coordination. Carbon Tax.
AB   Traditional public finance theory may be applied to the internalization of international environmental externalities. The policy constraint imposed by the absence of sovereign international government may be partially overcome through international environmental agreements. Instruments such as cost sharing, found in existing agreements, are generally unsophisticated. Two proposals entailing improved instruments are considered: (a) an international carbon tax, and (b) a global commons trust fund financed by earmarked excise taxes. Political realities appear to preclude environmental taxes, but modest improvements in the design and implementation of existing instruments may be feasible.

Hewitt, Daniel P.
TI   Economic Consequences of Lower Military Spending: Some Simulation Results. AU   Bayoumi, Tamim A.; Hewitt, Daniel P.; Schiff, Jerald.

PD   March 1993. TI   Military Expenditures 1972-1990: The Reasons Behind the Post-1985 Fall in World Military Spending.   AA   International   Monetary   Fund. SR   International Monetary Fund Working Paper: WP/93/18; International Monetary Fund, Washington, DC 20431. PG   20. PR   not available. JE   H56. KW   Military Spending. World Security.
AB   World military expenditures have fallen by over 20 percent in proportion to GDP from 1985 to 1990. This study examines the determinants of military expenditures in 125 countries during 1972-90 to ascertain what factors may be behind the recent decreases. Economic decline among developing countries in the 1980's and among industrial countries in the later part of the decade emerges as one possible factor. A second is the move towards more democratic regimes, which could diminish support for the military. A third factor is the improved world security situation and the concomitant decrease in military aid by the former major cold war combatants.

Himmelberg, Charles P.
TI   Evidence on the Role of Cash Flow for Investment. AU   Gilchrist, Simon; Himmelberg, Charles P.

Ho, Chun-Wa

PD February 1993. **TI** An Exact Algorithm for Maximum Entropy Sampling. **AU** Ho, Chun-Wa; Lee, Jon; Queyranne, Maurice. **AA** Ho: Rutgers University. Lee: Yale University. Queyranne: University of British Columbia. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9306; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 11. **PR** not available. **JE** C63. **KW** Computational Complexity. Principal Minors.

AB We study the computational complexity of finding extremal principal minors of a positive definite matrix. In particular, we focus on the NP-hard problem of maximizing the determinant over the set of principal submatrices of a given order. This problem arises in the area of statistical design, where one wishes to select a subset of some correlated Gaussian random variables having maximum entropy. In this case, the input matrix is the covariance matrix of the random variables and the entropy is the logarithm of the determinant. We establish an upper bound for the entropy, based on the eigenvalue interlacing property, and we incorporate this bound in a branch-and-bound algorithm for the exact solution for the problem. We present computational results for estimated covariance matrices corresponding to sets of environmental monitoring stations in the United States.

Hoff, Karla

PD September 1992. **TI** Collateral, Asymmetric Information and Pareto-Improving Labor Taxation. **AU** Hoff, Karla; Lyon, Andrew B. **AA** University of Maryland-College Park. **SR** University of Maryland Department of Economics Working Paper: 92-13; University of Maryland, College Park, MD 20742. **PG** 20. **PR** no charge. **JE** J24, H24, D82. **KW** Labor Tax. Private Information. Capital Market.

AB This paper considers a model in which laissez-faire does not attain a efficient sorting of individuals across occupations because of private information in the capital market. The paper establishes two results. First, a labor tax whose revenues are returned to taxpayers by lump sum grants in an amount equal to the expected tax payment can substitute for the lack of collateral on the part of some individuals. It thereby yields a Pareto improvement. Second, a labor tax whose revenues are distributed lump sum to the poor can raise productivity and, through that effect, social welfare.

PD May 1993. **TI** Non-Leaky Buckets. **AU** Hoff, Karla; Lyon, Andrew B. **AA** University of Maryland. **SR** University of Maryland Department of Economics Working Paper: 93-5; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 29. **PR** no charge. **JE** H23, D31, J24, J22. **KW** Income Redistribution. Human Capital Formation. Taxation.

AB Economists have generally argued that income redistribution entails a cost in aggregate incomes. In a model with risk neutral individuals and private information, this paper provides a counter-example based on the ability of wealth transfers to mitigate a problem of adverse selection in human capital formation. A wage tax creates the usual distortion in the labor-leisure choice, but the transfers it finances reduce distortions in investment in human capital. Redistributive taxation can thereby yield Pareto improvements, can increase aggregate incomes, and in some cases Pareto dominates seemingly better targeted interventions in the credit market.

Honkapohja, Seppo

TI Adaptive Forecasts, Hysteresis and Endogenous Fluctuations. **AU** Evans, George W.; Honkapohja, Seppo.

Hoover, Kevin D.

PD March 1993. **TI** Pragmatism, Pragmaticism and Economic Method. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-3; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 31. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** B41. **KW** Economic Methodology. Rhetoric.

AB Recently economic methodologists and historians have appealed to the methodology of modern pragmatism, as represented in the writings of philosophers such as Quine, Rorty and Sellars and of literary critics such as Fish. In his work on the history of stability theory and in his condemnation of Methodology, Weintraub adopts a pragmatic stance. Charles Sanders Peirce is generally credited with founding pragmatism. Even in his own lifetime, Peirce had to distinguish his doctrine from those of James, Dewey and others who are the direct precursors to the modern pragmatists with the name "pragmaticism." This paper sketches the main lines of Peirce's doctrine and argues that it points scientific inquiry in economics and elsewhere in a more fruitful direction than modern pragmatism. In particular, it avoids the risks of intellectual balkanization and intolerance embedded in some modern interpretations of pragmatism.

Horn, Henrik

PD June 1993. **TI** Local Services and International Market Integration. **AU** Horn, Henrik; Shy, Oz. **AA** Horn: Stockholm University. Shy: Tel Aviv University. **SR** Tel Aviv Sackler Institute of Economic Studies: 11/93; Department of Economics, Tel Aviv University, Ramat Aviv, ISRAEL. **PG** 16. **PR** no charge. **JE** F15, L10. **KW** Market Segmentation. Goods Bundle.

AB The consequences of international market integration are typically evaluated by comparing an equilibrium where international consumer arbitrage is impossible to a different equilibrium where arbitrage is assumed to be completely costless. This note suggests that this procedure tends to exaggerate the gains from integration since firms can still segment markets themselves after government imposed trade restrictions are removed. We develop a simple example with two products, one that is homogeneous across markets, and one that is bundled with a non-tradable, e.g., local services. Integration of the markets for the homogeneous product has the expected consequence of yielding product's price equalization across markets. However, integration of markets for bundled products will leave the economy entirely unaffected.

Horne, Jocelyn

TI Net Foreign Assets and International Adjustment: The United States, Japan, and Germany. **AU** Masson, Paul R.; Kremers, Jeroen; Horne, Jocelyn.

Houpis, George

PD March 1993. **TI** The Effects of Lower Hours of Work on Wages and Employment. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 131; Centre for Economic Performance, London School of Economics,

Houghton Street, London WC2A 2AE, ENGLAND. PG 37. PR no charge. JE J22, J31, E24, J23. KW Labor Supply. Hourly Wage.
AB This paper examines the likely effects of a reduction in hours of work on employment and wages. We first assume that the wage is fixed and present evidence on the direct employment effect of a fall in hours of work. We then analyze the indirect effect on employment from a change in the hourly wage when this is determined endogenously. Our results suggest that reductions in hours of work are not likely to lead to an increase in the hourly wage and will therefore reduce unemployment by sharing any given volume of work among more people. These findings are robust to a number of alternative assumptions about wage and hours determination.

Hu, Zuliu

PD December 1992. TI Risk-Taking and Optimal Taxation with Nontradable Human Capital. AA International Monetary Fund. SR International Monetary Fund Working Paper: 92/105; International Monetary Fund, Washington, DC 20431. PG 15. PR not available. JE D91, D81, H21, J22. KW Labor Supply. Life Cycle Model.
AB What are the effects of taxation on individual/entrepreneurs' risk-taking behavior? This paper re-examines this old question in a continuous time life-cycle model. We demonstrate that the stream of uncertain income from human capital has systematic effects on demand for the risky physical capital asset. If labor supply is inelastic and real wages are known with certainty, then a labor income tax will reduce holdings of the risky physical asset. However, if there are random fluctuations in labor income, then the effect depends on the nature of interaction between wage risk and investment income risk. A labor income tax may actually raise demand for the risky capital asset if human capital risk and physical capital risk are positively correlated. The idiosyncratic risk and nontradability of human capital also have implications for optimal taxation. When the insurance and disincentive effects are jointly taken into account, a Pareto efficient tax structure implies a strictly positive tax rate.

PD March 1993. TI The Yield Curve and Real Activity. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/93/19; International Monetary Fund, Washington, DC 20431. PG 18. PR not available. JE E43, E32, G12, E37. KW Interest Rates. Business Cycles.
AB The financial press frequently suggests that the shape of yield curve reflects information about the prospects of the economy. This paper attempts to formalize the link between the yield curve and real economic activity. A closed-form formula for the term structure of interest rates is derived. It is shown that the term structure embodies the market's expectation about changes in the macroeconomic fundamental--the growth in real aggregate output of the economy. The paper then documents the use of bond market data for predicting GDP growth in the G-7 industrial countries. The results suggest that a simple measure of the slope of the yield curve, namely the yield spread, serves as a good predictor of future economic growth. The out-of-sample forecasting performance of the yield spread compares favorably with that of the alternative stock price-based model and a univariate time series (ARMA) model. One practical implication is that it may be useful to add some measure of the term structure to the list of leading indicators.

PD March 1993. TI Intertemporal Substitution in Consumption Revisited. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/93/26; International Monetary Fund, Washington, DC 20431. PG 19. PR not available. JE D91, E21, E60. KW Consumer Preference.
AB Some of the highly controversial questions in macroeconomics critically hinge on the value of a single parameter of consumer preference--the elasticity of intertemporal substitution. This paper provides new estimates of this parameter for individual G-7 and a panel of twenty OECD countries. We find that single equation GMM estimates are typically small and imprecise, consistent with Hall's (1988) finding from the U.S. data. Estimation of a system of equations that takes into account the cross-equation restrictions implied by theory, however, generally gives larger and better determined values for the parameter. The panel procedure also yields relatively large estimates. Overall our multi-country results contradict the hypothesis of zero intertemporal substitution.

Hylleberg, Svend

PD April 1993. TI Tests for Seasonal Unit Roots. General to Specific or Specific to General? AA University of Aarhus. SR Aarhus Institute of Economics Memo: 1993-14; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. PG 29. PR no charge. JE C22, C32, C13. KW Seasonal Integration. Stationarity.
AB In this paper the small sample properties of tests for seasonal unit roots in quarterly time series are evaluated and compared. The basic difference between the two tests is that the HEGY test adopts the general to specific strategy and tests the null of a unit root, while the CH test adopts the specific to general principle and tests the null of a stationary process around a deterministic seasonal pattern. The main result of the Monte Carlo experiments is that the two tests complement each other.

Ibragimov, Ildar A.

PD April 1993. TI Efficient Estimation of Average Derivative. AA Universite Catholique de Louvain and Russian Academy of Sciences. SR Universite Catholique de Louvain CORE Discussion Paper: 9314; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 14. PR not available. JE C13, C14. KW Kernel Estimation. Smoothness. Nonparametric Problems.
AB We propose here a variant of kernel estimators for weighted average derivatives. We investigate also under which a priori conditions imposed on the smoothness of density function the effective estimation is possible. This result is connected with general results about efficient estimation of nonlinear functionals in nonparametric statistical problems.

Ichimura, Hidehiko

PD April 1993. TI Maximum Likelihood Estimation of a Binary Choice Model with Random Coefficients of Unknown Distribution. AU Ichimura, Hidehiko; Thompson, T. Scott. AA University of Minnesota. SR University of Minnesota Center for Economic Research Discussion Paper: 268; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis,

MN 55455. **PG** 32. **PR** no charge. **JE** C13, C14, C15. **KW** Nonparametric Estimation.
AB This paper presents a maximum likelihood estimator of a binary choice model with random coefficients. The model does not require parametric specification of the distribution of the coefficients. We discuss identification and prove consistency under suitable conditions. We show that the estimator does a reasonable job of recovering the unknown coefficient distribution in some small example problems. In our Monte Carlo experiments the new estimator performs well. The nonparametric estimator has superior predictive performance relative to the probit estimator when the true coefficient distribution is significantly non-normal, due to the bias displayed by the probit estimator. The new estimator requires substantial computer resources to calculate, but is feasible using current technology.

Ickes, Barry W.
TI Departures from the Ruble Zone: The Implications of Adopting Independent Currencies. **AU** Goldberg, Linda S.; Ickes, Barry W.; Ryterman, Randi.

Ip, Wal Cheung
PD February 1993. **TI** Second Order Correction by the Bootstrap. **AU** Ip, Wal Cheung; Phillips, Garry D. A. **AA** Ip: Hong Kong Polytechnic. Phillips: University of Bristol and University of Exeter. **SR** University of Bristol Working Paper: 93/346; Department of Economics, University of Bristol, 8 Woodland Road, BS8 ITN, ENGLAND. **PG** 9. **PR** no charge. **JE** C13. **KW** Estimators. Asymptotic Expansions.
AB The bootstrap and other empirical correction procedures have been shown to yield estimators which are unbiased to first order. However, when the bootstrap is appropriately manipulated within relevant asymptotic expansions it may be able to reduce the bias of an estimator or an estimator of its variance, correct to the second order term. The proposed approach substitutes bootstrap estimators in known asymptotic expansions It is programmable but needs only minimal additional computations to the usual bootstrap.

Irwin, Douglas A.
PD March 1993. **TI** The GATT's Contribution to Economic Recovery in Post-War Western Europe. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 442; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 29. **PR** no charge. **JE** F13, N14. **KW** Trade Agreements. Tariffs.
AB This paper describes and assesses the contribution of the GATT in supporting economic recovery in Western Europe in the decade after 1947. The formation of the GATT by itself does not appear to have stimulated a particularly rapid liberalization of world trade during this period. The principal contribution of the GATT during its first decade of operation rests more in securing binding agreements on early tariff reductions, thereby preventing countries from instituting higher tariffs as import quotas and foreign exchange controls were being phased out during the 1950's under the auspices of other international institutions. Yet despite the GATT's weaknesses on several fronts, the institution succeeded in establishing among major countries a fairly credible commitment to an open

and stable environment for world trade that fostered the post-war rise in trade and income.

Iyigun, Murat
TI The Profitability of Colonialism. **AU** Grossman, Herschel I.; Iyigun, Murat.

Jaditz, Ted
PD September 1992. **TI** Another Look at Evidence on the Distribution of Certain Speculative Prices. **AU** Jaditz, Ted; Johnson, David S.; McClelland, Robert. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 233; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 22. **PR** no charge. **JE** C22. **KW** Chaos. Nonlinear Dynamics. ARCH.
AB Benoit Mandelbrot suggests that prices of certain commodities follow stable Paretian distribution laws. Our results indicate that ARCH-type models fit some Mandelbrot time series fairly well. In other cases, tests for nonlinear dependence exhibited by these data are generally not consistent with the hypothesis that they are generated by a chaotic dynamic process.

PD September 1992. **TI** Is Chaos Generic in Economic Data? **AU** Jaditz, Ted; Sayers, Chera L. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 234; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 23. **PR** no charge. **JE** C22. **KW** Nonlinear Dynamics. Specification Testing.
AB This paper examines recent developments in nonlinear science in economics. Several claims of findings of chaos in economic data are reviewed. We discuss how each claim has been revised in light of further analysis, and point out several traps for empirical researchers in economic data. These traps suggest certain methodological refinements useful for researchers analyzing very small data sets, including diagnostic tests to detect ill conditioned data, filtering data to exclude non-chaotic alternatives, and nonparametric procedures to check the precision of parameter estimates. Most specialists in the field would say there is no conclusive evidence of chaos in economic or financial data.

Jain, Raj K.
PD June 1992. **TI** A State Space Model-Based Approach to Intervention Analysis in the Seasonal Adjustment of BLS Series: Some Empirical Results. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 228; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 14. **PR** no charge. **JE** C10, C43. **KW** Explanatory Variables. Kalman Filter.
AB The Intervention and Explanatory variables are incorporated in the statistical models of BLS series. The State-Space/Kalman Filter methodology is used to estimate these models. EM algorithm and a quasi-Newton algorithm are employed to estimate the hyper-parameters of those models. Two BLS series are seasonally adjusted using these models and the empirical results relating to the effects of intervention analysis and explanatory variables on seasonal adjustment are presented.

PD June 1992. **TI** A State Space Modelling Approach to the Seasonal Adjustment of the Consumer Price and Other BLS

Indexes: Some Empirical Results. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 229; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 64. **PR** no charge. **JE** C13, C52. **KW** Kalman Filter.
AB The State Space model and the Kalman Filter estimation methodology are used to estimate and analyze several statistical models including models which approximate the X-11 symmetric filters for seasonally adjusting a time series of U.S. consumer price and other BLS indexes. The hyper-parameters of these models are estimated by the EM algorithm until the algorithm starts converging slowly after which the quasi-Newton algorithm of Broyden, Fletcher, Goldfarb, and Shanno (BFGS) is employed to quickly achieve the optimum of the objective function. The Akaike Information Criterion (AIC) is used as the criterion to discriminate among various models. The empirical results show that the structural models in which the seasonal pattern is allowed to change over time perform better than other models and all structural models have lower AIC than those representing the X-11 method of seasonal adjustment.

PD September 1992. **TI** Structural Model-Based Seasonal Adjustment of the Bureau of Labor Statistics Series. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 236; Bureau of Labor Statistics, 2 Massachusetts Avenue. **PG** 38. **PR** no charge. **JE** C22, C13, C52. **KW** Unobserved Trend. Model Selection.
AB The structural time series models with unobserved trend, seasonal and error component models are cast in state space form and the Kalman filtering and smoothing methodology is used to estimate these unobserved components. The seasonally adjusted series is obtained by subtracting the estimated seasonal component from the observed series. The relative variances of the unobserved component model errors are estimated by the EM algorithm and a quasi-Newton algorithm. Several well known statistical criteria are used to judge the adequacy, the goodness of fit and the the forecasting performance of each model and the Akaike Information Criterion is used to choose the optimal model for seasonal adjustment. Several structural models are estimated using three BLS series including an employment series, an unemployment series and the CPI of gasoline series.

Jarmin, Ronald S.
PD February 1993. **TI** Learning by Doing and Competition in the Early Rayon Industry. **AA** Jarmin: U.S. Bureau of the Census. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 93-4; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 22. **PR** no charge. **JE** D83, D43, L67, C73. **KW** Oligopoly. Spillover Learning.
AB In this paper, I derive a structural econometric model of learning by doing from a dynamic oligopoly game. Unlike previous empirical models, this model is capable of testing hypotheses concerning both the technological nature and behavioral implications of learning. I estimate the model with firm level data from the early U.S. rayon industry. The empirical results show that there were considerable differences across firms in both proprietary and spillover learning. The results also indicate that two of the three firms took their rival's reactions into account when choosing their strategies.

Jensen, Henrik
PD August 1992. **TI** The Advantage of International Fiscal Cooperation under Alternative Monetary Regimes. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1992-19; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 20. **PR** no charge. **JE** F42, E63, E61, F33. **KW** International Policy Coordination. Credibility.
AB We consider the strategic interplay between international monetary and fiscal cooperation in a world of interdependent economies. Motivated by the ongoing discussion of monetary unification of Europe, the focus is on monetary cooperation, and, in particular, how its performance is altered by the introduction of fiscal (tax) cooperation. Our main result is that fiscal cooperation may be disadvantageous when monetary cooperation lacks credibility with private sectors. On the other hand, fiscal cooperation under a rule based monetary regime is always advantageous.

PD October 1992. **TI** Loss of Monetary Discretion in a Simple Dynamic Policy Game. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1992-18; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 18. **PR** no charge. **JE** E52, E61. **KW** Credibility. Monetary Policy. Policy Rules.
AB We analyze a simple policy game featuring monetary credibility problems, and argue that loss of monetary discretion is not advantageous. Two elements form the basis of our analysis. Firstly, we endogenize the source of credibility problems, and secondly, we consider a dynamic framework where credibility problems are not time invariant. By doing this we are able to demonstrate that credibility problems are temporary, and in steady state, the government has removed these through sound policies. A binding policy rule will only serve as an obstacle towards this steady state.

PD November 1992. **TI** Sustaining Policy Cooperation Between Economies of Different Size. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1992-17; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 17. **PR** no charge. **JE** E61, F41, F42. **KW** International Policy Coordination. Policy Games. Trigger Strategies.
AB We consider an example of a two-country model featuring national heterogeneity, and demonstrate that heterogeneity plays an important role for the countries' gains from international policy cooperation, and - just as important - for the incentives to break the cooperative agreement. We find that national heterogeneity unambiguously reduces trigger strategies' support for policy cooperation. In other words, the more countries differ, the harder is policy cooperation to sustain.

John, Kose
TI Top-Management Compensation and Capital Structure. **AU** John, Teresa A.; John, Kose.

John, Teresa A.
PD not available. **TI** Top-Management Compensation and Capital Structure. **AU** John, Teresa A.; John, Kose. **AA** New York University. **SR** New York University Salomon Brothers Working Paper: S-93-19; Salomon Brothers

Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 26. **PR** not available. **JE** J33, G32. **KW** Managerial Incentives. Agency Costs. Convertible Debt.

AB The interrelationship between top-management compensation and the design and mix of external claims issued by a firm is studied. The optimal managerial compensation structures depend on not only the agency relationship between shareholders and management, but also the conflicts of interest which arise in the other contracting relationships for which the firm serves as a nexus. We analyze in detail the optimal management compensation for the cases when the external claims are (1) equity and risky debt, and (2) equity and convertible debt. In addition to the role of aligning managerial incentives with shareholder interests, managerial compensation in a levered firm also serves as a precommitment device to minimize the agency costs of debt. The optimal management compensation derived has low pay-performance sensitivity. With convertible debt, instead of straight debt, the corresponding optimal managerial compensation has high pay-to-performance sensitivity. A negative relationship between pay-performance sensitivity and leverage is derived.

Johnson, David S.

PD June 1992. **TI** Nonparametric Tests for the Independence of Regressors and Disturbances. **AU** Johnson, David S.; McClelland, Robert. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 231; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 24. **PR** no charge. **JE** C52, C14. **KW** Specification Test. Misspecification.

AB In this paper we present three nonparametric misspecification tests that, without distributional assumptions, check for the independence of regressors and disturbances. While independence is stronger than needed for ordinary least squares regressions, it is often needed for semi-parametric estimation. The presence of dependence indicates that the current model is misspecified and an alternative model should fit the data better. Nuisance parameter theorems allows us to apply tests to residuals of a regression instead of disturbances. The first analysis is a simple Chi square test on the distribution of regression residuals and the distribution of some norm of the regressors. We find this method has little power against dependence between any moment of the residual and the norm of the regressors. The remaining procedures use kernel estimation techniques first applied to economic time series by Brock, Dechert and Scheinkman (1987).

TI Another Look at Evidence on the Distribution of Certain Speculative Prices. **AU** Jaditz, Ted; Johnson, David S.; McClelland, Robert.

Johnston, Barbara

TI Stealing the Emperor's Clothes: Deficit Offloading and National Standards in Health Care. **AU** Boothe, Paul; Johnston, Barbara.

Jorgensen, Bjorn Nybo

PD May 1993. **TI** The Arbitrage Pricing Theory and Learning. **AU** Jorgensen, Bjorn Nybo; Staehr, Michael H. **AA** Jorgensen: Northwestern University. Staehr: University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1993-

16; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 10. **PR** no charge. **JE** D83, G12, E44. **KW** Information. Arbitrage Pricing.

AB The arbitrage pricing model is reformulated to exhibit some appealing features. It is shown that in the arbitrage pricing model agents can learn the correct values of the coefficients of the underlying model over time, i.e. they can learn the coefficients essential to their diversification. Furthermore, it is shown that inferring the information contents does not hinge on the sequence of assets chosen. This resolves a recently raised critique towards the Arbitrage Pricing Theory concerning alleged non-uniqueness of the information contents of factor subspaces.

Jouneau, F.

TI Choix de Portefeuille dans un Environnement d'Investissement Desagrege: le Cadre Statique. **AU** Gourieroux, Christian; Jouneau, F.

Jullien, B.

PD January 1993. **TI** Competing Vertical Structures: Precommitment and Renegotiation. **AU** Jullien, B.; Caillaud, B.; Picard, P. **AA** Jullien: CEPREMAP and INSEE. Caillaud: CERAS-ENPC and CEPREMAP. Picard: Universite de Paris X and CEPREMAP. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9312; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 33. **PR** no charge. **JE** L14, D82, D43, L13. **KW** Principal-Agent Theory. Contracts. Strategic Complementarity.

AB We consider a model where two agents, privately informed on their own characteristics, play a (normal form) game on behalf of two uniformed principals. We analyze the existence of precommitment effects through public announcements of contracts, in a model where agency contracts, designed ex-ante, can always be secretly renegotiated, at ex-ante and interim stages. We show that the existence of precommitment effects depends both on the strategic complementarity of the agents' actions and on the direct effect of the opponents' actions on each principal's welfare. In our model, the possibility of renegotiation is crucial for the existence of precommitment effects. Our results are robust to other specifications of the timing, in particular when all contracts are designed at an interim stage. The results are introduced through an example of Cournot and Bertrand competition between firms, viewed as vertical structures.

PD February 1993. **TI** Information, Stabilite des Prix et Bien-etre. **AA** CEPREMAP and INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9311; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 16. **PR** no charge. **JE** G14, G12, D52, D60. **KW** Asset Market. Price Stability. Welfare Effects.

AB In the context of a stationary economy, where markets for long-lived real assets open periodically, we analyze the welfare effect of the information structure. At each period, agents receive a signal related to the future dividends of assets. Whenever the quality of the information increases, the price volatility increases. Asset dividends are more predictable but at the expense of a higher capital risk, since future prices are less predictable. The global risk on assets returns may then increase, resulting in a lower welfare level. The paper exhibits an example where, due to this effect, agents prefer a structure

where nobody receives any information to any other stationary information structure.

Kajii, Atsushi

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

Kalai, Ehud

TI Unobserved Delegation. **AU** Fershtman, Chaim; Kalai, Ehud.

TI Unobserved Delegation. **AU** Fershtman, Chaim; Kalai, Ehud.

Kaminsky, Graciela L.

PD February 1993. **TI** Does Foreign Exchange Intervention Signal Future Monetary Policy? **AU** Kaminsky, Graciela L.; Lewis, Karen K. **AA** Kaminsky: Board of Governors of the Federal Reserve System. Lewis: University of Pennsylvania. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-1; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 27. **PR** no charge. **JE** F31, E52, E58. **KW** Sterilized Interventions. Monetary Policy.
AB A frequently cited explanation for why sterilized interventions may affect exchange rates is that these interventions signal central banks' future monetary policy intentions. This explanation presumes that central banks in fact back up interventions with subsequent changes in monetary policy. We empirically examine this hypothesis using data on market observations of U.S. intervention together with monetary policy variables and exchange rates. We strongly reject the hypothesis that interventions convey no signal. However, we also find that in some episodes, intervention signaled changes in monetary policy in the opposite direction of the conventional signaling story. This finding can explain why in some periods exchange rates moved in the opposite direction of that suggested by intervention.

Karni, Edi

PD April 1993. **TI** Technological Progress and Income Inequality: A Model with Human Capital and Bequest. **AU** Karni, Edi; Zilcha, Itzhak. **AA** Karni: Johns Hopkins University. Zilcha: Tel Aviv University. **SR** Johns Hopkins Department of Economics Working Paper: 308; Department of Economics, Johns Hopkins University, Baltimore, Maryland 21218. **PG** 19. **PR** no charge. **JE** D31, D91, D11. **KW** Overlapping Generations. Technological Change.
AB This paper studies the effect of technological improvements on intergenerational distribution of incomes, with special emphasis on the role of human capital. In an overlapping generations economy, parents must choose between bequeathing their offspring with human capital and nonhuman capital. Parents are assumed to be aware of the native abilities of their children and consequently, of the differential returns to investing in the two forms of capital within this framework we examine the income distribution effects of alternative types of technological improvements.

PD May 1993. **TI** Technological Progress and Income Inequality: A Model with Human Capital and Bequest. **AU** Karni, Edi; Zilcha, Itzhak. **AA** Karni: Johns Hopkins University. Zilcha: Tel Aviv University. **SR** Tel Aviv Sackler Institute of Economic Studies: 8/93; Department of Economics, Tel Aviv University, Ramat Aviv, ISRAEL. **PG** 19. **PR** no charge. **JE** D91, O15, O33, D31. **KW** Income Distribution. Overlapping Generations.
AB This work analyzes the effect of technological changes on intragenerational income distribution in an aggregative overlapping-generations model with human capital. The investment of parents in educating their offspring and the intergenerational transfers are motivated by their utility function. Human capital of each individual is determined by his education and some random "ability." Comparing two equilibrium paths (with and without technological progress) we find that: (a) A Hicks neutral technological change has no effect on the intragenerational distribution of incomes in all generations; (b) a Harrod neutral technological change increases (decreases) the level of inequality in all periods if the elasticity of substitution of the aggregate production function is smaller (larger) than 1. A Solow-neutral technological change has the opposite effect in all periods.

Karp, Larry S.

PD August 1990. **TI** A Dynamic Model of Oligopoly in the Coffee Export Market. **AU** Karp, Larry S.; Perloff, Jeffrey M. **AA** Karp: University of California, Berkeley and University of Southampton. Perloff: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics Working Paper: 555 Rev.; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 14. **PR** $7.25. **JE** L11, L13, D43, F14. **KW** Competitiveness. Export Marketing.
AB A linear-quadratic, dynamic feedback oligopoly model that nests various market structures is used to estimate the degree of competitiveness and the adjustment paths of the two largest coffee exporters, Brazil and Colombia. Their estimated behavior is relatively competitive. This subgame perfect dynamic model is compared to a standard static oligopoly model and the open-loop model (the dynamic generalization of the standard static model). Both classical and Bayesian tests of open-loop and feedback dynamic models are reported.

Kashyap, Anil K.

PD April 1993. **TI** Monetary Policy and Bank Lending. **AU** Kashyap, Anil K.; Stein, Jeremy C. **AA** Kashyap: University of Chicago and National Bureau of Economic Research. Stein: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4317; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 51. **PR** $5.00. **JE** G21, E51, E52. **KW** Policy Transmissions. Lending Channel.
AB This surveys recent work that relates to the "lending" view of monetary policy transmission. It has three main goals: 1) to explain why it is important to distinguish between the lending and "money" views of policy transmission; 2) to outline the microeconomic conditions that are needed to generate a lending channel; and 3) to review the empirical evidence that bears on the lending view.

Keeler, Theodore E.

PD April 1993. **TI** Hospital Costs and Excess Bed Capacity: A Statistical Analysis. **AU** Keeler, Theodore E.;

Ying, John S. **AA** Keeler: University of California, Berkeley. Ying: University of Delaware. **SR** University of California at Berkeley Working Paper in Economics: 93-209; IBER, 156 Barrows Hall, University of California, Berkeley, CA 94720. **PG** 20. **PR** $3.50 U.S.A. and Canada. $7.00 foreign. **JE** I11, C21. **KW** Excess Capacity. Utilization Rate.
AB The present paper develops and estimates a cost model for U.S. hospitals which enables us to analyze the cost of excess bed capacity. A new estimate is worth making for at least two reasons. First, recent changes in the economic environment in which hospitals operate has caused their utilization rates in the U.S. to fall sharply over the past decade, making previous estimates inaccurate. Second, the present paper employs econometric techniques of cost estimation not previously applied to this problem, with estimation based on all U.S. short-term community hospitals from 1979 through 1989. Our results, based on conservative estimates of the average optimal occupancy rate, indicate an annual cost of excess bed capacity (in current dollars) of $13.2 billion in 1989, $18.4 billion in 1991, and over $20 billion in 1993.

Kelejian, Harry H.
PD May 1993. **TI** Sample Selection in a Switching Model Framework: An Alternative to Two-Step Methods. **AA** University of Maryland. **SR** University of Maryland Department of Economics Working Paper: 93-6; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 9. **PR** no charge. **JE** C13, C24. **KW** Two-Stage Estimation.
AB There are many cases in which a variable of interest is explained by a regression model, which is selected from a set of regression models according to a criterion. Many of these models are estimated by two-stage methods. These methods simplify the calculations involved concerning parameter estimation but the VC matrix remains difficult to calculate; another problem is that results relating to these two-step procedures are not available for models is which there are possibly a large (but finite) number of regimes, each possibly corresponding to a systems of equations which may or may not contain endogenous variables, and nonlinearities. The purpose of this paper is to suggest an alternative procedure which does not suffer from these problems.

Keunings, R.
TI A New Approach to Minimizing the Frontwidth in Finite Element Calculations. **AU** De Souza, C. C.; Keunings, R.; Wolsey, Laurence A.; Zone, O.

Kim, In Joon
PD April 1993. **TI** A Simplified Approach to the Valuation of American Options and its Applications. **AU** Kim, In Joon; Yu, G. George. **AA** Kim: Korea Advanced Institute of Science and Technology. Yu: J. P. Morgan Securities, Inc. **SR** New York University Salomon Brothers Working Paper: S-93-18; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 26. **PR** not available. **JE** G12, G13. **KW** Valuation Formulas. Asset Pricing.
AB In this paper we examine the structure of American option valuation problems and derive the analytic valuation formulas under general underlying security price processes by a simple and intuitive method. For alternative diffusion processes,

we derive closed-form analytic valuation formulas and analyze the implications of asset price dynamics on the early exercise premiums of American options. In this regard, we introduce useful and interesting diffusion processes into American option pricing literature, thus providing a wide range of choices of pricing models for various American-type derivative assets. This work offers a useful analytic framework for empirical testing and practical applications such as the valuation of corporate securities and examining the impact of options trading on market micro-structure.

Kiyotaki, Nobuhiro
TI Buyers and Sellers. **AU** Burdett, Kenneth; Coles, Melvyn; Kiyotaki, Nobuhiro; Wright, Randall.

Kleitt, Andrew N.
TI Fight, Fold or Settle?: Modeling the Reaction to FTC Merger Challenges. **AU** Coate, Malcolm B.; Kleitt, Andrew N.; Bustamante, Rene.

Klonsky, Karen
TI Marketing California Cotton: An Economic and Policy Overview. **AU** Siebert, Jerome B.; Klonsky, Karen; Pradhan, Vijay.

Knetter, Michael M.
TI Market Share and Exchange Rate Pass-Through in World Automobile Trade. **AU** Feenstra, Robert C.; Gagnon, Joseph E.; Knetter, Michael M.

Knight, Malcolm
PD December 1992. **TI** Testing the Neoclassical Theory of Economic Growth: A Panel Data Approach. **AU** Knight, Malcolm; Loayza, Norman; Villanueva, Delano. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 92/106; International Monetary Fund, Washington, DC 20431. **PG** 29. **PR** not available. **JE** O41, O47, C23. **KW** Economic Growth. Convergence.
AB Several recent empirical studies have examined determinants of economic growth using country average (cross-section) data. In contrast, this paper employs a technique for using a panel of both cross-section and time-series data for 98 industrial and developing countries over 1960-85 to determine the quantitative importance for economic growth of both country-specific and time-varying factors such as human capital, public investment, and outward-oriented trade policies. The empirical results provide support for the view that the factors exert a positive and significant influence on economic growth. They also provide estimates of the speed at which the gap in real per capita income between rich and poor countries is likely to be reduced over the longer term.

Ko, Chun-Wa
PD November 1992. **TI** The Volume of the Relaxed Boolean Quadric Polytope. **AU** Ko, Chun-Wa; Lee, Jon; Steingrimsson, Einar. **AA** Ko: Rutgers University. Lee: Yale University. Steingrimsson: Matematiska Institutionen CTH & GU. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9262; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 6. **PR** not available. **JE** C61. C63. **KW** Binary Program.
AB not available.

Konings, Jozef

PD April 1993. **TI** Evidence of Efficiency Wage Payments in U.K. Firm Level Panel Data. **AU** Konings, Jozef; Walsh, Patrick P. **AA** Konings: London School of Economics. Walsh: Trinity College. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 138; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 30. **PR** no charge. **JE** J41, C52, D43. **KW** Vertical Spillovers. Oligopoly.

AB Efficiency wage theories have been put forward as attractive ways of explaining different aspects of the labor market. To find direct evidence of efficiency wage payments has proven to be quite difficult. We model various vertical spillovers from wage determination in an upstream labor market to market share performance in a downstream product market and vice versa. We do this within Sutton's (1991) general oligopoly model under alternative theories of the labor market. Rent sharing due to efficiency wages is shown to create only a downstream vertical spillover, while rent sharing due to wage bargaining creates a two way vertical spillover. The spillover that drives a positive relationship between a firm's wage growth and product market performance. Using U.K. firm level panel data we constrain the data with our theory to pinpoint the downstream spillover due to efficiency wage payments. The spillover turns out to be significant and we claim this to be the first direct and general empirical evidence for efficiency wage payments.

Kotlikoff, Laurence

PD March 1993. **TI** The Equity of Social Services Provided to Children and Senior Citizens. **AU** Kotlikoff, Laurence; Gokhale, Jagadeesh. **AA** Kotlikoff: Boston University and National Bureau of Economic Research. Gokhale: Federal Reserve Bank of Cleveland. **SR** National Bureau of Economic Research Working Paper: 4305; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** J14, J13, H50, H20. **KW** Elderly. Taxation. Transfer Payments.

AB This paper marshals a variety of different types of evidence in considering the degree of equity in the government's treatment of children vis-a-vis adults, particularly the current elderly. It documents the high level of transfer payments going to the elderly relative to those going to children, even if one includes educational expenditures on children as a transfer payment. But children and the elderly are at different stages of their life cycles. Controlling for the stage of the life cycle requires examining the government's fiscal treatment of generations over their entire lifetimes. Accordingly, the paper presents/projects lifetime net tax rates for generations born from 1900 through the present as well as for generations that will be born in the future. These lifetime tax rates indicate that today's and tomorrow's children could well end up paying as much as 50, 60, or even 70 percent of their lifetime incomes to the government while generations that are now old will end up paying only about 25 percent of their lifetime incomes to the government.

Krajnyak, Kornelia

TI Economic Restructuring, Unemployment, and Growth in a Transition Economy. **AU** Chadha, Bankim; Coricelli, Fabrizio; Krajnyak, Kornelia.

Kramarz, F.

TI Voice and Loyalty as a Delegation of Authority: A Model and a Test on a Panel of French Firms. **AU** Cahuc, P.; Kramarz, F.

PD May 1993. **TI** How Agents Plan Their Actions in Games: A Model of Players' Reasoning with Common Knowledge of Rationality. **AA** INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9322; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris Cedex 14, FRANCE. **PG** 40. **PR** no charge. **JE** C72. **KW** Extensive Form Games. Epistemic Logic.

AB In this article, we model the reasoning of players in games in extensive form. To do this, we use epistemic logic. We carefully distinguish between plans and actions. A plan is a tool of computation for a player when she selects her strategy. Plans are close in spirit to the strategies of the game under normal form. Actions incorporate the sequentiality of the extensive form i.e. the succession of nodes. We specify axioms of rationality both for the modeler and the players using these plans and actions. We derive the equilibria of the game for different solution concepts (Nash, rationalizability, subgame perfectness) as theorems of our logic. The selected solution concept depends upon the specific axiom of rationality used by the players.

PD May 1993. **TI** How Agents Plan Their Actions in Games: A Model of Players' Reasoning with Bounded Rationality. **AA** INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9325; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris Cedex 14, FRANCE. **PG** 24. **PR** no charge. **JE** C72. **KW** Extensive Form Games. Epistemic Logic. Common Knowledge.

AB In this article, we model the reasoning of players in games in extensive form when players deviate from a plan computed with common knowledge of rationality. To do this, we use epistemic logic. As advocated in a companion paper (Kramarz (1993)), we carefully distinguish between plans and actions. A plan is a tool of computation for a player when she selects her strategy. Actions incorporate the sequentiality of the extensive form i.e. the succession of nodes. We also specify axioms of rationality both for the modeler and the players using these plans and actions. Because of the deviations, rationality cannot be common knowledge anymore. However, we give the amount of irrationality needed to explain away any deviation of a player's opponent. Thus, players are able to derive any deviation as a theorem of our logic.

Kremers, Jeroen

TI Net Foreign Assets and International Adjustment: The United States, Japan, and Germany. **AU** Masson, Paul R.; Kremers, Jeroen; Horne, Jocelyn.

Kremp, E.

TI A Look at Productivity at the Firm Level in Eight French Service Industries. **AU** Mairesse, J.; Kremp, E.

Kubokawa, T.

PD April 1993. **TI** New Perspectives on Linear Calibration. **AU** Kubokawa, T.; Robert, C. **AA** Kubokawa: University of Tokyo and URA CNRS. Robert: Universite de Rouen. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9319; INSEE, Unite de Recherche, 18 Bd.

Adolphe Pinard, 75675 Paris Cedex 14, FRANCE. **PG** 15. **PR** no charge. **JE** C15, C44. **KW** Inverse Regression. Classical Estimator.
AB In univariate calibration, two standard estimators are usually opposed: the classical estimator and the inverse regression estimator. Controversies have followed the use of both estimators and we consider them from a decision-theoretic perspective, establishing the inadmissibility of the classical estimator and the admissibility of the inverse regression estimator. The latter allowing for a Bayesian interpretation, we also develop a fully noninformative study of the calibration model and derive a reference prior which avoids the inconsistency drawbacks of the inverse regression estimator.

Kuran, Timur
PD December 1992. **TI** Now Out of Never: The Element of Surprise in the East European Revolution of 1989. **AA** University of Southern California. **SR** University of Western Ontario Papers in Political Economy: 27; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 45. **PR** no charge. **JE** F02, O52, P26, D74. **KW** Uprisings. Eastern Europe.
AB Like many major revolutions in history, the East European Revolution of 1989 caught its leaders, participants, victims, and observers by surprise. This paper offers an explanation whose crucial feature is a distinction between private and public preferences. By suppressing their antipathies to the political status quo the East Europeans misled everyone, including themselves, as to the possibility of a successful uprising. In effect, they conferred on their privately despised governments an aura of invincibility. Under the circumstances, public opposition was poised to grow explosively if ever enough people lost their fear of exposing their private preferences. The currently popular theories of revolution do not make clear why uprisings are easily explained after the fact even if they were not anticipated. The theory developed here fills this void. Among its predictions is that political revolutions will unavoidably continue to catch the world by surprise.

Lagunoff, Roger D.
PD April 1993. **TI** Agitators and Free Riders on the Path to Cooperation: The Evolution of Cooperation in Mechanisms for Public Projects. **AU** Lagunoff, Roger D.; Matsui, Akihiko **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-14; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 30. **PR** no charge. **JE** H41, D71. **KW** Binary Decision Mechanisms. Public Goods. Cooperation.
AB When is a mechanism successful in facilitating cooperation for the provision of a public good? This paper seeks to clarify the explicit, real time dynamic process under which cooperation emerges in a class of binary decision mechanisms each of which determines funding for a public project. We characterize the parameters for which there are absorbing states of the process which support cooperation in a mechanism, and find conditions for which there is a transition path from states with nonprovision to states with fully cooperative provision.

Laidler, David
PD March 1993. **TI** Monetarism - The Unfinished Business. **AA** University of Western Ontario. **SR** University of Western Ontario Papers in Political Economy: 29; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 19. **PR** no charge. **JE** E13, E51, E52. **KW** Monetarism. Research Agenda.
AB When someone is described as a "monetarist" these days, it is seldom meant as a compliment. But we do not generally pin labels on our own lapels, and those of us who have been classified as "monetarists" for the last two decades have no alternative but to try to make that label mean what we, rather than our critics, would like it to mean. And that it what this paper is about. In it, I shall first of all describe what traditional academic monetarism was, and defend it against charges of error and obsolescence. I shall also have something to say about its "guilt by association" with conservative politics. But most important of all, I shall draw attention to elements in the monetarist literature which, to my mind, not only render it a "progressive research agenda," but also suggest that it is in fact nothing more nor less than the latest manifestation of that same ongoing tradition in monetary economics to which Thornton, Ricardo, Marshall, Wicksell, and Keynes, among many others have contributed.

Lal, Deepak
PD January 1993. **TI** Does Openness Matter? How to Appraise the Evidence. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 690; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 22. **PR** $5.00; checks payable to U.C. Regents. **JE** F43, N10. **KW** Growth. Protectionism. Open Economy.
AB The paper considers various aspects of the ideas and evidence responsible for the third protectionist wave since the Second World War. It looks at recent theoretical developments, econometric studies and historical studies on the relationship of "openness" to growth. It also provides an alternative explanation based on the control function of private wealth in industrial organizations to the "functional" dirigisme advocated by the "market governance" school of Chalmers, Johnson, Amsden and Wade. A final section re-examines the twin case for laissez-faire and free trade as supported by the classical economists.

Lambelet, Jean-Christian
TI Les Effets de la Dereglementation du Prix de l'Essence.
AU Buehler, Guy; Lambelet, Jean-Christian.

Lapham, Beverly J.
PD June 1993. **TI** A Dynamic Model of Endogenous Trade Policy. **AU** Lapham, Beverly J.; Ware, Roger. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 885; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 17. **PR** $3.00 + GST Canada; $3.50 U.S. and foreign. **JE** F13, C73. **KW** Free Trade. Lobbying. Interest Groups.
AB A puzzle in the analysis of trade policy is why free trade outcomes, which maximize world income, are not more often observed. One reason is that economic agents with special

interests affect both the form and level of international protective policies. This paper investigates the dynamic interaction of special interest groups and highlights endogenous links between current policies and future policies. We explore these intertemporal links in a general equilibrium environment in which lobbying activity and tariff policies are the outcome of a dynamic game among interest groups located in both countries. In the Markov perfect equilibrium, future policies are affected by current policies as the current trade regime affects the ability and the willingness of these groups to lobby for future policies which favor their interests. An unusual feature of the economy is that the transition probabilities over trading regimes are endogenous.

Lapson, Robert
PD December 1992. TI Expected Value, Expected Utility...or Should We Expect Something Else. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1037; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. PG 27. PR $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. JE D81. KW Non-Expected Utility. Lexicographic Preferences. Allais Paradox.
AB A procedure for decision-making under risk is developed and axiomatized. It provides another explanation for the Allais paradox as well as justification for some other preference patterns that can not be represented by the expected utility model, but it includes expected utility representation of preferences as a particular case. The idea of the procedure is that evaluation of the lotteries takes two steps. First, a decision maker classifies a lottery as a "bad", "good" or "medium" one. Then comparing the lotteries the decision maker uses lexicographic ordering between the classes and expected utility value (with possibly different utility scales for different classes) within each of the three categories. The paper contains comparison of the suggested procedure with several other non-expected utility models. Many preference patterns that motivated the other models can be explained within the suggested procedure.

PD March 1993. TI Cooperation by Indirect Revelation Through Strategic Behavior. AA Northwestern University. SR Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1036; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. PG 22. PR $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. JE C72. KW Prisoners Dilemma. Sequential Equilibrium.
AB The paper deals with a one-shot prisoners' dilemma when the players have an option to go to court but cannot verify their testimonies. To solve the problem a second stage is added to a game. At the first stage the players are involved in the prisoners' dilemma and at the second stage they play another game in which their actions are verifiable. In such a setup the information about the actions chosen at the prisoners' dilemma stage can be revealed through strategic behavior of the players during the second stage. A mechanism for such revelation in the extended game is described. It provides an existence of a unique sequential equilibrium, which may be obtained by an iterative elimination of dominated strategies and has a number of desirable properties.

Laroque, G.
PD March 1993. TI Simulation-Based Estimation of Models with Lagged Latent Variables. AU Laroque, G.; Salanie, B. AA Laroque: INSEE. Salanie: ENSAE. SR Unite de Recherche Document de Travail ENSAE/INSEE: 9315; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 17. PR no charge. JE C32, C34, C15, C13. KW Simulation. Dynamic Models.
AB We extend here our earlier work (Laroque-Salanie (1989)) and propose a dynamic simulated pseudo-maximum likelihood method to deal with a very general class of dynamic nonlinear models, including models with lagged latent variables. We test this method on Monte Carlo-generated data for a canonical disequilibrium model. It appears to provide very satisfactory estimates at little computational cost. However, accurate estimation of the standard errors of the estimates in non-differentiable models may require some care.

Le Breton, Michel
PD May 1991. TI Strongly Balanced Cooperative Games. AU Le Breton, Michel; Owen, Guillermo; Weber, Shlomo. AA Le Breton: University of Marseille. Owen: University of Monterey. Weber: York University. SR Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-338; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG 12. PR no charge. JE C71. KW Graph Theory. Integral Property. Assignment Games.
AB In this paper we introduce the concept of "strong balancedness" of a hypergraph, which provides as intuitive graph-theoretic interpretation of "integral property" of games in characteristic function form formulated by Kaneko/Wooders (1982). We apply the results from the hypergraph theory, presented in Berge (1987), and show that strong balancedness is equivalent to "normality" (Lovasz (1972)). We also study interesting economic examples of "communication" and "assignment" games and provide a direct proof that these games are strongly balanced.

Leamer, Edward E.
PD April 1993. TI U.S. Manufacturing and an Emerging Mexico. AU Leamer, Edward E.; Medberry, Chauncey J. AA Leamer: University of California, Los Angeles and National Bureau of Economic Research. Medberry: University of California, Los Angeles. SR National Bureau of Economic Research Working Paper: 4331; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR $5.00. JE F13, F14. KW Trade. Trade Barriers.
AB This paper offers a vision of the future of trade in manufactured products between Mexico and the United States. This vision is formed from a study of the 1970 and 1985 trade patterns of OECD countries. The vision accounts directly for the proximity of Mexico and the United States, and also for the continuing wage gap between Mexico and the United States. The vision accounts indirectly for the declining level of trade barriers and for the technological improvements that are probable in a liberalized Mexico. Based on the OECD trade patterns, an emerging Mexico will present U.S. export opportunities that are a significant fraction of current U.S. production of transportation equipment, chemicals and machinery. But Mexican exports are likely to displace a

substantial amount of U.S. production of apparel, footwear, pottery and leather products.

Lee, Jon
TI   The Volume of the Relaxed Boolean Quadric Polytope.
AU   Ko, Chun-Wa; Lee, Jon; Steingrimsson, Einar.

TI   An Exact Algorithm for Maximum Entropy Sampling.
AU   Ho, Chun-Wa; Lee, Jon; Queyranne, Maurice.

Lee, Joon-Haeng
TI   Regime Switching with Time-Varying Transition Probabilities. AU   Diebold, Francis X.; Lee, Joon-Haeng; Weinbach, Gretchen C.

Lehmann, Hartmut
PD   April 1993. TI   The Effectiveness of the Restart Programme and the Enterprise Allowance Scheme. AA   London School of Economics. SR   London School of Economics Centre for Economic Performance Discussion Paper: 139; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG   50. PR   no charge. JE   E24, J68, J64. KW   Unemployment. Outflow Rates.
AB   The Restart program and the Enterprise Allowance Scheme were introduced in the eighties to combat the high levels and the persistence of unemployment. This paper uses aggregate time series to investigate whether these measures have been important determinants of the overall and duration-specific outflow rates from unemployment. Careful exploration of the data precedes model specification and selection to ensure that the regression results mirror a stable economic relationship over the sample period. These results show, besides a minor role for the Enterprise Allowance Scheme, that the introduction of the Restart program has contributed greatly to the cure of partial hysteresis in Britain.

Leiderman, Leonardo
TI   Israel's Stabilization: Some Important Policy Lessons.
AU   Bufman, Gil; Leiderman, Leonardo.

Letiche, John M.
PD   December 1992. TI   Maastricht: Prospect and Retrospect. AA   University of California, Berkeley. SR   University of California at Berkeley Working Paper in Economics: 92-205; IBER, 156 Barrows Hall, University of California, Berkeley, CA 94720. PG   23. PR $3.50 U.S.A. and Canada. $7.00 foreign. JE   F33, F36. KW   European Monetary Union.
AB   The paper outlines the conditions for membership in the European Monetary Union and anticipates the difficulties various countries may have in meeting those conditions. It outlines the advantages and disadvantages of the treaty. Estimates of the effects of convergence are provided.

Lewis, Karen K.
TI   Does Foreign Exchange Intervention Signal Future Monetary Policy? AU   Kaminsky, Graciela L.; Lewis, Karen K.

Lian, Peng
PD   March   1993.   TI   General   Equilibrium, Macroeconomics and Money in a Laboratory Experimental Environment. AU   Lian, Peng; Plott, Charles R. AA   Lian: Harvard University and Massachusetts Institute of Technology. Plott: California Institute of Technology. SR   Caltech Social Science Working Paper: 842; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. PG   29. PR   no charge. JE   C90, D58, E31. KW   Experiments. Circular Flow Model.
AB   This paper reports on the use of laboratory experimental techniques to create relatively complete economic systems. The creation of these systems reflects a first attempt to explore the nature of inherently dynamic and interdependent environments and to assess the ability of simultaneous equations equilibrium models like the classical circular flow model or the general competitive equilibrium model, to predict aspects of their behaviors. In addition, the impact of the quantity of a fiat money was studied. The economies were successfully created. Classical models capture much of what was observed.

Liang, Zhiwu
TI   Leaving Parental Home: Census-Based Estimates for China, Japan, South Korea, United States, France and Sweden. AU   Zeng, Yi; Coale, Ansley; Choe, Minja Kim; Liang, Zhiwu; Liu, Li.

Lieb, Robert C.
TI   The Use of Third Party Logistics Services by Large Western European Manufacturers. AU   Wassenhove, Luk; Lieb, Robert C.; Millen, Robert A.

Lieberman, O.
PD   December 1992. TI   A Laplace Approximation to the Moments of a Ratio of Quadratic Forms in Normal Variables. AA   INSEE. SR   Unite de Recherche Document de Travail ENSAE/INSEE: 9301; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG   11. PR   no charge. JE   C63, C13. KW   Boundary Point. Integration.
AB   The method of Laplace for integrals' approximation is adopted in presenting a general approximation for the kth moment of a ratio of quadratic forms in normal variables. The technique utilizes the existence of a dominating peak at the boundary point on the range of integration, which leads to a convenient approximation. As closed form and tractable formulas do not exist for the general case, the simple approximation which only entails basic matrix operations, has an evident practical appeal. We exploit the approximation in providing an approximate mean-bias function for the least squares estimator of the coefficient of the lag dependent variable in a first order stochastic difference equation.

Liu, Li
TI   Leaving Parental Home: Census-Based Estimates for China, Japan, South Korea, United States, France and Sweden. AU   Zeng, Yi; Coale, Ansley; Choe, Minja Kim; Liang, Zhiwu; Liu, Li.

Lizondo, J. Saul
PD   April 1993. TI   Real Exchange Rate Targeting Under Imperfect Asset Substitutability. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/93/38; International Monetary Fund, Washington, DC 20431. PG   17. PR   not available. JE   F31, E31, E63, E61, F41. KW   Inflation. Policy Shocks.

AB This paper presents a model of an economy that uses nominal exchange rate policy to keep the real exchange rate constant at a certain target level, under imperfect asset substitutability. The paper discusses the determinants of inflation under such a policy, and examines the consequences of exogenous and policy-induced shocks on inflation, the external accounts, and the fiscal accounts. The shocks considered include changes in the real exchange rate target, changes in fiscal policy, changes in foreign interest rates, and open market sales of public sector domestic bonds.

Loayza, Norman
TI Testing the Neoclassical Theory of Economic Growth: A Panel Data Approach. AU Knight, Malcolm; Loayza, Norman; Villanueva, Delano.

Loewenstein, Mark A.
TI Gender Differences in Training, Capital, and Wages. AU Barron, John M.; Black, Dan A.; Loewenstein, Mark A.

TI Bidding for Workers. AU Black, Dan A.; Loewenstein, Mark A.

Lollivier, S.
TI Estimation de la Duree du Chomage en France en 1986. AU Cases, C.; Lollivier, S.

Long, William F.
PD February 1993. TI LBO's, Debt and R&D Intensity. AU Long, William F.; Ravenscraft, David J. AA Long: U.S. Bureau of the Census. Ravenscraft: University of North Carolina. SR Bureau of the Census Center for Economic Studies Discussion Paper: 93-3; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. PG 26. PR no charge. JE G34, O31. KW Leveraged Buyout. Debt.
AB This paper details the impact of debt on R&D intensity for firms undergoing a leveraged buyout (LBO). We develop seven hypotheses based on capital market imperfection theories and agency theory. To test these hypotheses, we we compare 72 R&D performing LBO's with 3329 non-LBO control observations and 126 LBO's with little or no R&D expenditure. The regressions yield four statistically significant major findings. First, pre-LBO R&D intensity is roughly one-half of the overall manufacturing mean and two-thirds of the firm's industry mean. Second, LBO's cause R&D intensity to drop by 40 percent. Third, large firms tend to have smaller LBO-related declines in R&D intensity. Fourth, R&D intensive LBO's outperform both their non-LBO industry peers and other LBO's without R&D expenditures.

Loute, Etienne
PD November 1992. TI A Parallel Block Cholesky Factorization for Staircase Linear Programming Problems. AU Loute, Etienne; Vial, Jean-Philippe. AA Loute: Universitaires Saint-Louis and Universite Catholique de Louvain. Vial: Universite de Geneve. SR Universite Catholique de Louvain CORE Discussion Paper: 9260; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 29. PR not available. JE C61. KW Parallelism. Interior Point Method.
AB We present a variant of the Cholesky factorization for block tridiagonal positive definite matrices. We show that a suitable ordering of block pivots makes it possible to parallelize the linear algebra on a multiple instruction multiple data (MIMD) processor architecture. The technique applies to linear programming problems with a staircase constraint matrix, a structure that is typical of dynamic (multiperiod, multistage) problems. We compute the amount of parallelism that is theoretically achievable and we show that the increase in block fill-in of the Cholesky factor is limited.

Luna, Francesco
PD January 1993. TI From the History of Astronomy to the Wealth of Nations: Wonderful Wheels and Invisible Hands in Adam Smith's Major Works. AA University of California, Los Angeles. SR University of California at Los Angeles Department of Economics Working Paper: 691S; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG 31. PR $5.00; checks payable to U.C. Regents. JE B31, B12, A12. KW Induction. History of Thought.
AB This paper proposes a re-reading of Smith's major works pointing at induction as the common characteristic and unifying element of the Theory of Moral Sentiments and the Wealth of Nations. All the salient aspects of of Smith's philosophical approach are already present in an earlier essay --The History of Astronomy--which, therefore, can be seen as the manifesto of his methodology. Philosophy is the art devoted to the discovery of the efficient cause that links together a series of disconnected objects in the observer's mind. Newton's gravity is the example that Smith refers to in his History of Astronomy. We maintain that Smith's project was that of finding the equivalent of such a connecting principle in his investigation of ethics in the Theory of Moral Sentiments, as well as of economics in the Wealth of Nations.

Lyon, Andrew B.
TI Collateral, Asymmetric Information and Pareto-Improving Labor Taxation. AU Hoff, Karla; Lyon, Andrew B.

TI Progressivity of Capital Gains Taxation with Optimal Portfolio Selection. AU Haliassos, Michael; Lyon, Andrew B.

TI Non-Leaky Buckets. AU Hoff, Karla; Lyon, Andrew B.

Machin, Stephen
TI What Has Happened to Union Recognition in Britain? AU Disney, Richard; Gosling, Amanda; Machin, Stephen.

Magdalinos, Michael A.
PD May 1993. TI Testing Instrument Admissibility: Some Refined Asymptotic Results. AA Athens University of Economics and Business and University of Bristol. SR University of Bristol Economics Working Paper: 93/354; Department of Economics, University of Bristol, Alfred Marshall Building, 8 Woodland Road, Bristol BS8 1TN, ENGLAND. PG 16. PR no charge. JE C52, C13. KW Instrumental Variables. Maximum Likelihood Test.
AB This paper is concerned with the refined asymptotic properties of several tests for the admissibility of a subset of (overidentifying) instrumental variables. It derives maximum likelihood (ML) and linearized ML tests and calculates size

corrections to the order 1/T. The local power function of the size-corrected tests is the same to the order 1/T, irrespective of the form of the test statistic or the limited information estimator used in its computation. Finally, it compares these tests with two previously proposed tests.

Magee, Karen L.

PD April 1993. **TI** The Kornai Effect with Partial Bailouts and Taxes. **AU** Magee, Karen L.; Quandt, Richard E. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 136; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544-1021. **PG** 10. **PR** $3.00 for U.S. mailings. $6.00 for foreign mailings. **JE** D21, H20. **KW** Subsidies. Taxation. Uncertainty.

AB The model examines Kornai's observation that in the presence of bailouts, firms' demand for inputs will be greater than would otherwise be the case. This conjecture is examined in a model in which both revenue and cost uncertainty are present and in which firms making losses are partially subsidized and firms making positive profits are partially taxed. The Kornai Effect is more prevalent the greater the subsidy rate, the smaller the tax rate and the greater the variance of the random variables through which uncertainty manifests itself. In the case of strongly positively correlated cost and revenue uncertainty, the absolute incidence of the Kornai Effect is small.

Mailath, George J.

PD February 1993. **TI** Normal Form Structures in Extensive Form Games. **AU** Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen M. **AA** Mailath: University of Pennsylvania. Samuelson: University of Wisconsin. Swinkles: Stanford University and Northwestern University. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 92-01-R; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297.   **PG** 29.   **PR** no   charge.   **JE** C72. **KW** Information Sets. Representation.

AB Mailath, Samuelson, and Swinkles (1992) introduce the normal form information set. Normal form information sets capture situations in which players can make certain decisions as if they knew their opponents had chosen from a particular subset of their strategies. In this paper, we say that an extensive form game represents a normal form game if, for each situation, the corresponding choice in the extensive form is made with the player knowing that the opponents have chosen from the relevant subset. We show that normal form games exist that cannot be represented. We develop an algorithm that generates a representation whenever one exists and present a necessary and sufficient condition for a normal form game to be representable.

PD April 1993. **TI** Normal Form Structures in Extensive Form Games. **AU** Mailath, George J.; Samuelson, Larry; Swinkels,   Jeroen   M.   **AA** Mailath: University   of Pennsylvania. Samuelson: University of Wisconsin. Swinkels: Northwestern   University.   **SR** Northwestern   University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1041; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. **PG** 29. **PR** $3.00 in U.S. and Canada; $5.00   via   international   mail; $2.00   for   local Northwestern   faculty/students.   **JE**   C72. **KW** Representation. Information Set.
AB See other entry.

PD April 1993. **TI** Structural Indifference in Normal Form Games. **AU** Mailath, George J.; Samuelson, Larry; Swinkels,   Jeroen   M.   **AA** Mailath: University   of Pennsylvania. Samuelson: University of Wisconsin. Swinkels: Northwestern   University.   **SR** Northwestern   University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1042; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. **PG** 23. **PR** $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. **JE**   C72. **KW** Refinements. Sequential Equilibrium.

AB Refinements of the Nash equilibrium concept differ in which indifferences between strategies they select for evaluation. In this paper, we suggest that "structural" indifferences, or indifferences that arise out of the structure of the payoffs of the game independently of opponents' strategies, are worthy of special attention. We define an order over a player's strategies, called the structural order, by ranking strategies according to expected payoff under a belief about opponents' play and requiring that (only) structural indifferences be evaluated by appealing to higher-order beliefs about opponents' play. We use the structural order to define an equilibrium concept called the structural indifference respecting equilibrium (SIRE). A proper equilibrium is SIRE but not conversely. We show that the lexicographic probability system used to describe beliefs about opponents' play when defining SIRE can always be taken to have disjoint supports. Finally, we argue that SIRE can be viewed as a normal form extension of the sequential equilibrium concept.

PD April 1993. **TI** Structural Indifference in Normal Form Games. **AU** Mailath, George J.; Samuelson, Larry; Swinkels,   Jeroen   M.   **AA** Mailath: University   of Pennsylvania. Samuelson: University of Wisconsin. Swinkels: Stanford   University   and   Northwestern   University. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-12; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 24. **PR** no charge. **JE** C72. **KW** Refinements. Proper Equilibrium. Sequential Equilibrium.
AB See other entry.

Mairesse, J.

PD January 1992. **TI** A Look at Productivity at the Firm Level in Eight French Service Industries. **AU** Mairesse, J.; Kremp, E. **AA** Mairesse: INSEE. Kremp: Banque de France. **SR** Unite   de   Recherche   Document   de   Travail ENSAE/INSEE: 9303; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG**   21. **PR** no charge. **JE**   D24, C23, L86, L84. **KW** Panel Data. Services. Production Function.

AB In this paper, we take advantage of information collected by the French annual survey of market services to analyze productivity differences and changes among firms in eight major industries (Restaurants, Hotels, Engineering, Computer Programming,   Computer   Processing,   Legal   Services,

Accounting and Building Cleaning), over the five year period 1984-1988. We find a pattern of cross-sectional and time-series type estimates of the Cobb-Douglas production function, which is comparable to that typically found in studies of manufacturing industries, thus raising similar issues of interpretation and modeling. Using a capital stock measure corrected for rented equipment and building and taking into account the number of hours of work per employee improve these estimates to some extent. An interesting finding is that the output elasticity seems significantly smaller with respect to hours per employee than with respect to the number of employees.

Malkiel, Burton G.
TI The Predictability of Stock Returns and the Efficient Market Hypothesis. **AU** Fluck, Zsuzsanna; Malkiel, Burton G.; Quandt, Richard E.

Mann, Catherine L.
TI Industry Restructuring and Export Performance: Evidence on the Transition in Hungary. **AU** Chang, Valerie J.; Mann, Catherine L.

Manning, Alan
PD March 1993. **TI** Endogenous Labour Market Segmentation in a Matching Model. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 126; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 27. **PR** no charge. **JE** J41, J42. **KW** Labor Market Segmentation.
AB This paper extends work by Burdett and Mortensen (1989) and Mortensen and Vishwanath (1991) and examines equilibria in a matching model with identical firms and workers in which employed as well as unemployed workers receive wage offers. It shows that there are generally a continuum of equilibria often of a form that resembles labor market segmentation in that there are some firms paying high wages and facing an excess supply of labor and some firms paying low wages with an excess demand for labor. The implications of the model are explored.

Manser, Marilyn E.
PD August 1992. **TI** The Allocation of Consumption by Married-Couple Families in the U.S: An Analysis Conditioning on Labor Supply. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 232; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 24. **PR** no charge. **JE** D11, D12. **KW** Consumer Demand. Separability.
AB Historically, most estimates of consumer demand have been based on the assumption that preferences for goods are separable from leisure. This study follows Browining and Meghir's approach (1991) to analyzing demand patterns conditioning on male and female work status and hours of labor supplied. It also explores implications of "collective" models of household decision-making. In contrast to Browning and Meghir's results for the U.K., there is somewhat weak evidence for the necessity of conditioning on labor supplies in estimating household demand patterns for the U.S. Husband/wife relative wages do not have a significant effect on the demands, while

total expenditures and the number of children have very strong effects.

PD September 1992. **TI** Estimates of Cash-Equivalent Values from a Flexible Demand System for the U.S. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 235; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. **PG** 29. **PR** no charge. **JE** D12, H53, D46. **KW** Non-Cash Benefits. Consumer Demand.
AB In the U.S., many people benefit from the provision by government or employers of a consumption good or service directly to them. But these "noncash" benefits are typically not accounted for in comparison of well well-being or of employee compensation among various groups. The cash equivalent value (CEV) approach to valuing these benefits values them as equal to the amount of a cash transfer that would make the recipient equally well off. This paper constructs CEV's for noncash benefits from two government programs, Food Stamps and Medicaid, which, unlike previous estimates, correspond to a flexible utility specification. Food Stamps are found to be equivalent to cash for all but the poorest units. CEV's for Medicaid are substantial but less than the cash value.

Marceau, Nicolas
TI Time-Consistent Criminal Sanctions. **AU** Boadway, Robin W.; Marceau, Nicolas; Marchand, Maurice.

Marchand, Maurice
PD March 1993. **TI** Optimal Intergenerational Transfers in an Endogenous Growth Model with Fertility Changes. **AU** Marchand, Maurice; Michel, Philippe; Pesteau, Pierre. **AA** Marchand: IAG and Universite Catholique de Louvain. Michel: Universite de Paris 1. Pesteau: Universite de Liege. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9311; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 16. **PR** not available. **JE** D91, O41, E21, H55. **KW** Social Security. Overlapping Generations. Saving.
AB This paper analyzes the direction of optimal intergenerational transfers in a setting of endogenous growth a la Arrow-Romer. It shows that the case for ascending transfers such as implied by pay-as-you-go social security is rather weak. What is rather needed is a subsidy on interest income. When demographic shocks are introduced, during the transition period following an unexpected fertility decline, the case for a transfer from the younger to the older generation appears to be stronger. We compare the market equilibrium and the optimal solution in the two cases of a permanent shock and of a transitory shock.

TI Time-Consistent Criminal Sanctions. **AU** Boadway, Robin W.; Marceau, Nicolas; Marchand, Maurice.

Marinacci, Massimo
PD May 1993. **TI** An Integral Representation for Non Simple Acts with Certainty Equivalents. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1046; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. **PG** 10. **PR** $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. **JE** D81, C44. **KW** Subjective Expected

Utility.
AB In this paper we consider a continuous subjective expected utility model with a connected space of consequences (CSEU, for brevity). This class of models has recently received attention (see Wakker (1989)). Like in Savage (1954), we consider a finitely additive probability measure on a sigma-field of events. The aim of the paper is to show that in such a Savagean set-up the appropriate condition to impose on the set of acts to get a CSEU model is to require the existence of certainty equivalents. While quite intuitive, several technical difficulties had to be solved in order to make this argument rigorous, as emerges in the appendix. Nevertheless, the results of the paper are clear and easy to understand.

Marshall, John M.

TI Public Finance of Private Goods: The Case of Higher Education. **AU** Garratt, Rod; Marshall, John M.

Masson, Paul R.

PD March 1993. **TI** Evaluating the EMS and EMU Using Stochastic Simulations: Some Issues. **AU** Masson, Paul R.; Symansky, Steven. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/28; International Monetary Fund, Washington, DC 20431. **PG** 20. **PR** not available. **JE** F15, F33, F31, F47. **KW** Monetary Integration. Monetary Policy. Exchange Markets.
AB Evaluations of European monetary integration using model simulations have given conflicting results, and the paper attempts to elucidate the reasons for the differences. Several features stand out: how to model realignments; how monetary policy is set for individual countries or for Europe; and how large are risk premium shocks in exchange markets. We quantify the effects of different assumptions relating to these features using MULTIMOD.

PD April 1993. **TI** Net Foreign Assets and International Adjustment: The United States, Japan, and Germany. **AU** Masson, Paul R.; Kremers, Jeroen; Horne, Jocelyn. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/33; International Monetary Fund, Washington, DC 20431. **PG** 12. **PR** not available. **JE** F32, F34. **KW** Public Debt. Feedback.
AB This paper examines external adjustment in the United States, Japan and Germany from the perspective of net foreign asset positions. It asks two questions: What are, in the long run, the determinants of net foreign asset equilibrium? and: What are, in the short run, some of the adjustment mechanisms sustaining that equilibrium? An analysis of post-war data produces two insights. First, using a cointegration approach, the existence of long-run net foreign asset equilibrium can be identified: it is a function of demographic variables and public debt. Second, deviations from long-run equilibrium give rise to feedback through different components of domestic absorption in the three countries.

Mastroyiannis, Tasos

PD March 1993. **TI** Testing for Cointegration with Transaction Costs: The Case of the Law of One Price. **AU** Mastroyiannis, Tasos; Pippenger, John. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 4-93; Working Papers Coordinator, Department of Economics, University of California at Santa Barbara, CA 93106. **PG** 21.

PR no charge. **JE** C22, F30, C12. **KW** Unit Roots. Purchasing Power Parity.
AB Economic theory often implies conditions where two series equal each other, or at least have a stable relationship, in long-run equilibrium. When those series have unit roots, standard regression analysis provides an inappropriate test of long-run equilibrium. Engle and Granger (1987) suggest a widely used alternative, testing for cointegration. But in some areas including purchasing power parity (PPP) and the law of one price (LOP), support for the implications of theory are the exception rather than the rule.

Matsui, Akihiko

TI Agitators and Free Riders on the Path to Cooperation: The Evolution of Cooperation in Mechanisms for Public Projects. **AU** Lagunoff, Roger D.; Matsui, Akihiko

Mayer, Thomas

PD May 1993. **TI** Indexed Bonds and Heterogeneous Agents. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-7; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 15. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** H63. **KW** Debt Management. Inflation Expectations.
AB Recently some economists have urged the U.S. Treasury to issue indexed securities because the yield differential between such securities and conventional securities would provide information on the public's expectations of inflation. But since indexed securities would be bought primarily by those whose inflation expectations are above average, or by those who have an unusual desire to hedge a given inflation risk their yield would provide a biased measure of inflation expectations. Data from the Livingston survey suggest that the bias would probably be substantial. But indexed securities would lower the interest cost of the debt.

PD June 1993. **TI** How Much Do Micro-Foundations Matter? **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-12; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 14. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** E12, B41. **KW** Keynesian Economics. New Keynesianism.
AB New classical economists criticized Keynesians for not providing adequate micro-foundations. Instead of responding by developing such micro-foundations, new Keynesian theory, Keynesians could have responded that complete micro-foundations, while desirable, are not necessary. This paper presents such a response. It does so by distinguishing between formalist economics that does require fully coherent micro-foundations, and empirical science economics that does not. In the latter context Keynes' explanation of wage stickiness should not be dismissed as "sociological".

McClelland, Robert

TI Nonparametric Tests for the Independence of Regressors and Disturbances. **AU** Johnson, David S.; McClelland, Robert.

TI Another Look at Evidence on the Distribution of Certain Speculative Prices. **AU** Jaditz, Ted; Johnson, David S.; McClelland, Robert.

McFarland-Marx, Leslie

AB In general, the result of the elimination of weakly dominated strategies depends on order. We find a condition, satisfied by the normal form of any generic extensive form, and by some important games which do not admit generic extensive forms, under which any two games resulting from the elimination of weakly dominated strategies (subject to no more eliminations being possible) are equivalent. We also extend our condition and result to the case of elimination by mixed strategies. The result strengthens the intuitive connection between backward induction and weak dominance. And, under our condition, some computational problems relating to weak dominance, which are generally complex, become simple.

Medberry, Chauncey J.

Mei, Jianping

Melitz, J.

AB As opposed to conventional analysis of monetary union between two particular countries or sets of countries, this paper treats the possible expansion of a given currency area as a continuous variable ranging from zero to one: zero if there is no expansion and one if all sources of imports and competition in trade are included in the union. The optimal order in which new members are admitted to the union then becomes one important aspect of the problem. It is shown that by using this approach, it is easier to defend the argument that many nations are too small to form optimal currency areas. The demands upon the origin of the shocks, factor mobility, and political organization are smaller. The approach also fits better with the evidence.

AB This paper attempts a closer integration of the theory of optimum currency areas with the theory of international trade. The currency area is considered as a continuous variable going from 0 to 1: zero if there is no enlargement, and some positive value otherwise corresponding exactly to the percentage of trade in the enlarged area. The benefits of widening a currency area are then treated in the same way as a reduction in transportation costs in ordinary trade theory. The costs of widening a currency area, in turn, are viewed as a drop in the speed of adjustment of the terms of trade to their long run equilibrium level. On this basis, it is shown that the marginal benefits of enlarging a currency area fall, the marginal costs rise, and an optimum size arises. But this size depends heavily on the optimal composition of the members.

AB The emergence of a single interbank market for reserves in the EC following monetary union raises a basis dilemma for policy. Either competition is allowed to decide the location of the interbank market and the national central banks will enter the competition, or else the location of this market is decided collectively from the start, but a uniform blueprint of central banking must be adopted. The sources of this dilemma and its consequences are the subject of the analysis.

Mendelsohn, Robert

AB This paper develops a "Ricardian" approach for measuring the economic impact of environmental factors such as climate by examining the direct impact of environmental factors on land prices. Estimating the model using cross-sectional data on climate, farm-land prices, and other economic and geophysical data for almost 3000 counties in the United States, we find that higher temperatures in all seasons except autumn reduce average farm values in the United States and more precipitation in all seasons except autumn increases farm values. Applying the model to a global-warming scenario finds a range of impacts depending upon whether the model emphasize the grains through cropland weights or a broader set of crops through crop-revenue weights. The results of the Ricardian approach show a significantly lower estimated impact of global warming than the traditional production-function approach.

Mendoza, Enrique G.

AB The performance of macroeconomic indicators of capital mobility is examined in the context of an intertemporal

equilibrium model of a small open economy. Recursive numerical solution methods are used to compute measures of consumption smoothing, savings-investment correlation, and the variability and output-correlation of investment that characterize the model in the presence of income disturbances. None of these statistics is a reliable indicator of capital mobility unless information regarding differences in preferences, technology, and the nature of stochastic shocks can be taken into account.

Mester, Loretta J.
TI   Financial Intermediation as Vertical Integration.
AU   Berlin, Mitchell; Mester, Loretta J.

Metcalf, David
PD   March 1993. TI   Industrial Relations and Economic Performance.   AA   London   School   of   Economics. SR   London School of Economics Centre for Economic Performance Discussion Paper: 129; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG   35. PR   no charge. JE   J53, J52, J51. KW   Pay. Company Performance. Industrial Action.
AB   Post-war concern about our industrial relations system has been dominated by three issues - pay, performance at workplace, company and national level, and industrial action. In each case the focus of interest is the link between the institutions, procedures and processes of the system and the outcomes that it generates. This paper evaluates evidence on these three issues for the last quarter of a century, since the publication of the Donovan Report in 1968. Special attention is given to information from successive WIRS's. The evidence suggests that (i) industrial action is of minor importance; (ii) the industrial relations system can no longer be held to stymie company performance; (iii) the pay/jobs trade-off is as intractable as ever.

Michel, Philippe
TI   Optimal Intergenerational Transfers in an Endogenous Growth Model with Fertility Changes.   AU   Marchand, Maurice; Michel, Philippe; Pesteau, Pierre.

TI   Optimal Growth and Transfers Between Generations.
AU   Fleurbaey, M.; Michel, Philippe.

Milesi-Ferretti, Gian Maria
PD   March 1993. TI   The Disadvantage of Tying Their Hands: On the Political Economy of Policy Commitments. AA   London School of Economics. SR   London School of Economics Centre for Economic Performance Discussion Paper: 125; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG   21. PR   no charge. JE   D72, F31, E61. KW   Incumbents. Exchange Rates. Inflationary Bias.
AB   Incumbents are more likely to be re-elected if they have a comparative advantage in the eyes of voters on some central electoral issue. This paper argues that incumbents have an incentive to avoid reforms that reduce the government's role in deciding these issues, in order to increase their chances of re-election. This point is illustrated in the context of the choice of an exchange-rate regime in an economy characterized by an "inflation bias." A flexible exchange rate allows the government to use monetary policy as a stabilization tool, while fixed

exchange rates remove the "inflation bias" of the economy. On the one hand, it is shown that a more inflation-averse government may refrain from choosing fixed exchange rates in order to capitalize on the "inflationary" reputation of its opponent. This incentive is contrasted with the opposite incentive to "tie the hands" of the future government should the incumbent be defeated.

Millen, Robert A.
TI   The Use of Third Party Logistics Services by Large Western European Manufacturers. AU   Wassenhove, Luk; Lieb, Robert C.; Millen, Robert A.

Miller, Marcus
TI   Is the Road to Monetary Union Paved With Recession? AU   Driffill, John; Miller, Marcus.

Milner, Simon
PD   April 1993. TI   Strikes and Non-Strike Action: Evidence on Relative Incidence. AA   London School of Economics. SR   London School of Economics Centre for Economic Performance Discussion Paper: 136; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG   14. PR   no charge. JE   J51, J52. KW   Overtime Bans. Industrial Action.
AB   Data on the relative "popularity" of strikes, overtime bans and go slows in the 1980's, kindly made available by the CBI, is compared to information from other surveys. The principal conclusion of the paper is that the relative incidence of overtime bans and strikes has reversed in the 1980's compared to the 1970's - overtime bans have been consistently more prevalent than strikes in the 1980's. The increased use of cut-price industrial action may be one factor not previously identified in the declining incidence of strikes over the last decade.

Minehart, Debby
TI   Loss Aversion in a Savings Model. AU   Bowman, David; Minehart, Debby; Rabin, Matthew.

Mintzberg, Henry
TI   Diversifiction and Diversifact. AU   Ghoshal, Sumantra; Mintzberg, Henry.

Miranda, Kenneth
TI   Public Expenditure Policy and the Environment: A Review and Synthesis. AU   Gupta, Sanjeev; Miranda, Kenneth; Parry, Ian.

Mirman, Leonard J.
PD   February 1992. TI   Duopoly Signal Jamming. AU   Mirman, Leonard J.; Samuelson, Larry; Urbano, Amparo. AA   Mirman: University of Virginia. Samuelson: University of   Wisconsin.   Urbano: University   of   Valencia. SR   Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: B-199; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG   29. PR   no charge. JE   C72, L13, D83. KW   Signaling. Duopoly Market. Information Sharing.
AB   This paper examines a repeated duopoly market with

heterogeneous outputs. Firms have (common) prior beliefs over the values of an unknown parameter of each firm's demand curve. Firms cannot observe rivals' quantities, but can observe market prices, which are subject to random disturbances and hence provide noisy information that firms use to update their beliefs concerning the unknown parameters' values. Each firm can potentially signal jam, or strategically vary its output level in order to manipulate the distribution of likely market prices and hence the likely inferences drawn by the opponent. We find that the opportunity to signal-jam introduces two conflicting effects, arising out of the desire to manipulate expectations concerning each of the two demand curves. Depending upon the relative magnitudes of these two effects, signal-jamming may lead firms to either increase or decrease period-one quantities.

Miron, Jeffrey A.

PD April 1993. **TI** Historical Perspectives on the Monetary Transmission Mechanism. **AU** Miron, Jeffrey A.; Romer, Christina D.; Weil, David N. **AA** Miron: Boston University and National Bureau of Economic Research. Romer: University of California, Berkeley and National Bureau of Economic Research. Weil: Brown University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4326; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $5.00. **JE** E51, E52, G21. **KW** Lending Channel. Bank Lending.
AB This paper examines changes over time in the importance of the lending channel in the transmission of monetary shocks to the real economy. We first use a simple extension of the Bernanke-Blinder model to isolate the observable factors that affect the strength of the lending channel. We then show that based on changes in the structure of banks assets, reserve requirements, and the composition of external firm finance, the lending channel should have been stronger before 1929 than during the post-World War II period, especially the first half of this period. Finally, we demonstrate that conventional indicators of the importance of the lending channel, such as the spread between the loan rate and the bond rate and the correlation between loans and output, do not show the predicted decline in the importance of lending over time. From this we conclude that either the traditional indicators are not useful measures of the strength of the lending channel or that the lending channel has not been quantitatively important in any era.

Mitra, Arindam

TI Edge City Economics. **AU** Henderson, Vernon; Mitra, Arindam.

Moghadam, Reza

PD April 1993. **TI** Labor Market Issues in Belgium: An International Perspective. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/32; International Monetary Fund, Washington, DC 20431. **PG** 16. **PR** not available. **JE** E24, J64, J65. **KW** Unemployment. Unemployment Benefits.
AB The characteristics of the Belgian labor market are examined using international comparisons in order to assess the government's recent labor market initiatives. The labor market in Belgium is found to suffer from a number of structural problems compared to other industrial countries: the non-

employment rate is very high, there are large regional disparities in unemployment, female and youth unemployment are prevalent and there is an unusually pronounced incidence of long-term unemployment. The causes of these problems are investigated. The empirical results, using cross section data from 15 industrial countries, show that the generosity of long-term unemployment benefits helps to explain the prevalence of long-term unemployment. Unemployment compensation also appears to be paid to many who are not actively seeking work. The recent labor market initiatives in Belgium will help to ameliorate some of the underlying problems but they are unlikely to completely address the underlying structural problems.

Moles, Jerry

TI Proceedings of the Panel Discussion on Property Rights. **AU** Wallace, L. Tim; Moles, Jerry; Rodrigues, Kim.

Monfort, A.

TI Modeles Statistiques de Valorisation par Arbitrage. **AU** Clement, E.; Gourieroux, Christian; Monfort, A.

Moore, George R.

TI Monetary Policy and the Behavior of Long-Term Real Interest Rates. **AU** Fuhrer, Jeffrey C.; Moore, George R.

TI Inflation Persistence. **AU** Fuhrer, Jeffrey C.; Moore, George R.

Morris, Stephen

PD January 1993. **TI** Noisy Bayes Updating and the Value of Information. **AU** Morris, Stephen; Shin, Hyun Song. **AA** Morris: University of Pennsylvania. Song: University College, Oxford. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 93-02; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 25. **PR** no charge. **JE** D81, D83. **KW** Subjective Beliefs. Conditional Beliefs. Decision Theory.
AB We examine the problem facing a decision maker who has access to a set of messages before making a decision, but who does not know the joint probability distribution over the set of messages and the payoff relevant states. We address the following question. Under what circumstances is the decision maker made better off by acting in accordance with his subjective conditional beliefs rather than ignoring the message and relying solely on the marginal distribution over payoff relevant states? We identify a necessary and sufficient condition for conditional beliefs to be valuable in this sense. We demonstrate that beliefs are valuable if and only if they can be shown to be a "noisy" version of the true distribution in a dynamic setting. A number of issues in economic and decision theory hinge on the valuable information condition identified here.

PD April 1993. **TI** Depth of Knowledge and the Effect of Higher Order Uncertainty. **AU** Morris, Stephen; Postlewaite, Andrew; Shin, Hyun Song. **AA** Morris and Postlewaite: University of Pennsylvania. Shin: University College, Oxford. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-15; University of Pennsylvania, Center for Analytic

Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 21. **PR** no charge. **JE** D82, D81. **KW** Bubbles. Asymmetric Information. Rational Expectations.
AB A number of recent papers have highlighted the importance of uncertainty about others' information in models of asymmetric information. We introduce a notion that reflects the depth of knowledge in an information system. We show how the depth of knowledge can be used to bound the effect of higher order uncertainty in certain problems. We further provide bounds on the size of bubbles in finite horizon rational expectations models where the bounds depend on the depth of knowledge.

Mount, K. R.
PD May 1993. **TI** Essential Revelation Mechanisms and Computational Complexity. **AU** Mount, K. R.; Reiter, Stanley. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1047; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. **PG** 30. **PR** $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. **JE** C63. **KW** Revelation Mechanisms. Computational Complexity.
AB Suppose a function F of n real variables is given. Is it possible to write F as a function of fewer than n variables? More particularly, what is the smallest number of variables on which the value of F "really" depends? We mention two contexts in which this question arises.

Mueller, Dennis
TI Market Structure and Growth. **AU** Dellas, Harris; Mueller, Dennis.

Murrell, Peter
PD February 1993. **TI** When Privatization Should Be Delayed: The Effect of Communist Legacies on Organizational and Institutional Reforms. **AU** Murrell, Peter; Wang, Yijiang. **AA** Murrell: University of Maryland-College Park. Wang: University of Minnesota. **SR** University of Maryland Department of Economics Working Paper: 93-1; University of Maryland, College Park, MD 20742. **PG** 28. **PR** no charge. **JE** L33, P21, P52. **KW** Economic Transition. Socialist Reforms.
AB This paper analyzes institutional and organizational developments in the early stages of post-socialist reforms, focusing on policy decisions on the timing of privatization and on the allocation of resources between different types of sectors. We identify links between these decisions and legacies of communism - - limited market resources, distorted industrial structures, and poor institutional conditions. The results are consistent with the observed pattern of development that has emerged across a wide variety of countries adopting different reform strategies. This pattern is one in which a burgeoning private sector of small firms in services and light industry develops separately from state-owned heavy industry.

Nadiri, M. Ishaq
TI Production, Financial Structure and Productivity Growth in U.S. Manufacturing. **AU** Bernstein, Jeffrey I.; Nadiri, M. Ishaq.

Nahr, K. Wilhelm
TI Money and Banking Statistics in Former Soviet Union (FSU) Economies. **AU** Di Calogero, Robert; Nahr, K. Wilhelm; Stillson, Richard T.

Neary, Peter
PD March 1993. **TI** How Newfoundland Veterans Became Canadian Veterans: A Study in Bureaucracy and Benefit. **AA** University of Western Ontario. **SR** University of Western Ontario Papers in Political Economy: 30; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 44. **PR** no charge. **JE** H56, H55, H77. **KW** Veterans Benefits.
AB not available.

Nelson, Julie A.
PD March 1993. **TI** On Testing for Full Insurance Using Consumer Expenditure Survey Data. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-2; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 9. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** D12. **KW** Consumption.
AB Mace (1991) presented empirical results consistent with the hypothesis of full consumption insurance, using U.S. Consumer Expenditure Survey data. Household-level changes in i unimportant in explaining changes in household consumption, when a measure of aggregate consumption was included. This comment demonstrates that when consumption and employment are measured more accurately, using the same data source, household-level income changes matter.

Nett, Lorenz
PD March 1993. **TI** Income Taxation and Voluntary Provision of Public Goods-Some Counterintuitive Results. **AU** Nett, Lorenz; Peters, Wolfgang. **AA** University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: A-406; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 5. **PR** no charge. **JE** H24, H41, H23. **KW** Equitability. Rawlsian Taxes. Utilitarian Taxes.
AB In a model of voluntary provision of public goods and endogenous labor supply we will derive some counterintuitive results. First, a reverse ranking between ability and utility may occur. Second, not any tax schedule induces an allocation fulfilling the property of equitability. Third, a Rawlsian optimal tax may be lower than a utilitarian one.

Neumark, David
PD May 1993. **TI** Relative Income Concerns and the Rise in Married Women's Employment. **AU** Neumark, David; Postlewaite, Andrew. **AA** Neumark: University of Pennsylvania and National Bureau of Economic Research. Postlewaite: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-17; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 28. **PR** no charge. **JE** J22, J16, J12. **KW** Labor Supply. Employment Decision.
AB We ask whether women's decisions to be in the labor

force may be affected by the decisions of other women in ways not captured by standard models. We develop a model that augments the simple neoclassical framework by introducing relative income concerns into women's (or families') utility functions. In this model, the entry of some women into paid employment can spur the entry of other women, independently of wage and income effects. This mechanism may help to explain why, over some periods, women's employment appeared to rise faster that could be accounted for by the simple neoclassical model. In particular, we look at the effects of sisters' employment on women's own employment, taking account of the possibility that there may be heterogeneity across families in unobserved variables affecting the employment decision. We find strong evidence that women's employment decisions are positively affected by their sisters' employment decisions.

Nicholl, Peter

PD October 1992. **TI** New Zealand's Monetary Policy Experiment. **AA** Reserve Bank of New Zealand. **SR** University of Western Ontario Papers in Political Economy: 31.; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 16. **PR** no charge. **JE** E58, E52, E65. **KW** Price Stability. Central Banks.
AB Monetary policy in New Zealand is aimed at the achievement of price stability. That in itself is not so unusual, as price stability is the stated objective of the monetary policy of many countries around the world. The uniqueness lies in the specification of the target, which is unusually well defined. This address: 1. explains the reasons for adopting this policy in New Zealand; 2. describes the main features of the framework; 3. explains how we implement monetary policy; 4. describes the behavioral changes that have resulted from the approach; and 5. describes what has happened to inflation and the economy since the approach was adopted.

Nielsen, Lars Tyge

PD October 1992. **TI** Understanding N(d1) and N(d2): Risk Adjusted Probabilities in the Black-Scholes Model. **AA** INSEAD. **SR** INSEAD Working Papers: 92/71/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 15. **PR** not available. **JE** G13. **KW** Option Pricing.
AB This paper uses risk-adjusted lognormal probabilities to derive the Black-Scholes formula and explain the factors N(d1) and N(d2). It also shows how the one-period and multi-period binomial option pricing formulas can be restated so that they involve analogues of N(d1) and N(d2) which have the same interpretation as in the Black-Scholes model.

PD November 1992. **TI** Exchange Rate and Term Structure Dynamics and the Pricing of Derivative Securities. **AU** Nielsen, Lars Tyge; Saa-Requejo, Jesus. **AA** INSEAD. **SR** INSEAD Working Papers: 92/72/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 37. **PR** not available. **JE** G15, G13, E43, F31. **KW** Contingent Claims. Interest Rates.
AB We develop a two-country version of the CIR (1985) model. It involves a two-factor term structure of interest rates in each country. The two state variables, which are the same for both countries, are the instantaneous interest rates in the two countries. The two term structures are correlated and interdependent through an explicit dependence of the yields of

bonds issued in one country on the interest rate in the other country. We also obtain the endogenous stochastic process followed by the exchange rate. Unlike the CIR model, ours does not imply that the instantaneous returns on bonds of all maturities are perfectly correlated. We present a partial differential equation for valuing exchange-rate and interest-rate sensitive contingent claims, and we derive closed-form expressions for discount bonds, forward exchange rates and futures exchange rates. The model provides an integrated framework for pricing and risk management for portfolios of exchange rate contingent securities and of bonds and interest rate derivatives denominated in more than one currency.

Norberg-Bohm, Vicky
TI Industrial Metabolism of Nitrogen. **AU** Ayres, Robert U.; Norberg-Bohm, Vicky

Nordhaus, William D.
TI Measuring the Impact of Global Warming on Agriculture. **AU** Mendelsohn, Robert; Nordhaus, William D.; Shaw, Daigee.

O'Connell, Stephen A.
PD April 1993. **TI** Dynamic Efficiency in the Gifts Economy. **AU** O'Connell, Stephen A.; Zeldes, Stephen P. **AA** O'Connell: Swarthmore College. Zeldes: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4318; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** $5.00. **JE** D81. **KW** Overlapping Generations. Capital Accumulation. Golden Rule.
AB In the standard analysis of an overlapping generations economy with gifts from children to parents, each generation takes the actions of all other generations as given. The resulting "simultaneous moves" equilibrium is dynamically inefficient. In reality, however, parents precede children in time and realize that children will respond to higher parental saving by reducing their gifts. Incorporating this feature lowers the effective return to saving, resulting in lower steady state capital accumulation. For a broad class of gift economies, we show that the steady state capital stock in the gifts model must be on the efficient side of the golden rule. The analysis therefore overturns the standard presumption of dynamic inefficiency in the gift economy. This result extends the recent literature on the effects of implicit taxation on capital accumulation, and provides a motivation for the presence of a Social Security type system that unconditionally transfers resources from young to old.

O'Sullivan, Arthur
PD May 1993. **TI** Property Taxes, Mobility, and Home Ownership. **AU** O'Sullivan, Arthur; Sexton, Terri A.; Sheffrin, Steven M. **AA** O'Sullivan: Oregon State University. Sexton: California State University at Sacramento. Sheffrin: University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-4; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 23. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** H24, R21, H71. **KW** Property Taxation. Acquisition Value.
AB In contrast with the conventional property tax, which is based on current market value, the acquisition-value property tax is based on the market value of the property at the time it

was purchased. A switch to an acquisition-value tax (i) decreases household mobility, (ii) increases the likelihood of home ownership among infrequent movers at the expense of frequent movers, and (iii) attracts infrequent movers and repels frequent movers. The differential excess burden of the acquisition-value tax (relative to a conventional property tax with a tax rate of 3 percent) is $206 per household per year, or 4.58% of the tax liability of the typical household. The transfer tax, which is an extreme version of the acquisition-value tax, has much larger distortionary effects: the differential excess burden is $2,128 per household per year, or 47% of the household's tax liability.

Oates, Wallace E.
PD May 1993. **TI** Fiscal Decentralization and Economic Development. **AA** University of Maryland. **SR** University of Maryland Department of Economics Working Paper: 93-4; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 14. **PR** no charge. **JE** H71, H72, H77. **KW** Local Government. Developing Countries.
AB This paper explores the role of fiscal decentralization in economic development, taking as its point of departure the widely documented weakness of local government in developing nations relative to that in the industrialized countries. A study of trends over time does not support the claim that fiscal decentralization normally occurs over the process of economic growth. Developing countries have a different starting point. The paper then discusses the conditions necessary for local government to perform effectively.

Obstfeld, Maurice
PD March 1993. **TI** Are Industrial-Country Consumption Risks Globally Diversified? **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4308; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $5.00. **JE** G15, D91. **KW** International Asset Markets. Global Diversification.
AB What idiosyncratic consumption risks can countries trade away on international asset markets? This paper develops an empirical methodology for answering the question. The tests are based on the proposition that in an integrated world asset market with representative national agents, the ex post difference between two countries' intertemporal marginal rates of substitution in consumption is uncorrelated with any random variable on which contractual payoffs can be conditioned. This result is applied to annual time-series data for the seven largest industrial countries over 1950-88. Of these countries, Germany seems to have been most successful at internationally diversifying its consumption risks.

Orphanides, Athanasios
PD May 1993. **TI** Optimal Consumption Dynamics with Non-Concave Habit Forming Utility. **AU** Orphanides, Athanasios; Zervos, David. **AA** Orphanides: Board of Governors of the Federal Reserve System. Zervos: Temple University and Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-15; C/O Stephen A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 7. **PR** no charge. **JE** D11. **KW** Habit Formation. Multiple Equilibria.

AB We study the dynamics of optimal consumption when preferences exhibit habit formation without imposing global concavity conditions on utility. We show that the optimal policy functions are monotonic in the stock of past consumption and provide a characterization of the dynamics despite possible multiplicities in optimal policies and steady states.

Ostry, Jonathan D.
TI Do Capital Flows Reflect Economic Fundamentals in Developing Countries? **AU** Ghosh, Atish R.; Ostry, Jonathan D.

Oswald, Andrew
TI Entrepreneurship, Happiness and Supernormal Returns: Evidence from Britain and the U.S. **AU** Blanchflower, David; Oswald, Andrew.

Owen, Guillermo
TI Strongly Balanced Cooperative Games. **AU** Le Breton, Michel; Owen, Guillermo; Weber, Shlomo.

Pakes, Ariel
TI An Alternative Theory of Firm and Industry Dynamics. **AU** Ericson, Richard; Pakes, Ariel.

Palfrey, Thomas R.
PD January 1993. **TI** Anomalous Behavior in Linear Public Goods Experiments: How Much and Why? **AU** Palfrey, Thomas R.; Prisbrey, Jeffrey E. **AA** Palfrey: California Institute of Technology. Prisbrey: Universitat Pompeu Fabra. **SR** Caltech Social Science Working Paper: 833; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 15. **PR** no charge. **JE** H41, C91. **KW** Voluntary Contributions. Free Riding.
AB We report the results of voluntary contributions experiments where subjects are randomly assigned constant marginal rates of substitution between the public and the private good. These random assignments are changed after each decision period. The design allows us to measure the response functions of the players in much the same way that bidding functions can be measured in private good, sealed-bid auction experiments. The results are quite different from the results of others in environments with little or no heterogeneity. We see much more free riding, very little evidence of decay across periods, and only sparse evidence of anomalous behavior such as splitting, spite, and decay.

Parker, Philip
TI Cultural Universals in Marketing: A Study of Consumers' Use of Brand Name, Price, Physical Appearance, and Retailer Reputation as Signals of Product Quality. **AU** Dawar, Niraj; Parker, Philip.

Parry, Ian
TI Public Expenditure Policy and the Environment: A Review and Synthesis. **AU** Gupta, Sanjeev; Miranda, Kenneth; Parry, Ian.

Parsons, Steven G.
PD February 1993. **TI** Telecommunications Bypass and

the "Brandon Effect". **AU** Parsons, Steven G.; Ward, Michael R. **AA** Parsons: Southwestern Bell Telephone. Ward: Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 199; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 18. **PR** no charge. **JE** L96, L51. **KW** Regulation. Telephone Companies. Long Distance.

AB The creation of a charge for long distance companies to access the local telephone companies' switched network created the incentive to bypass the local switched network in order to avoid access charges that were substantially above cost. This paper explores the implications of a federal regulatory policy of a target total dollar switched access revenue requirement. In particular, the paper focuses on the so called "Brandon Effect" in which bypass incentives are attenuated when there is a target total dollar switched access revenue. Empirical analysis confirms the "Brandon Effect" on bypass decisions.

Paxon, Christina
TI Intertemporal Choice and Inequality. **AU** Deaton, Angus; Paxon, Christina.

Paxson, Christina H.
TI Saving, Growth, and Aging in Taiwan. **AU** Deaton, Angus; Paxson, Christina H.

Perloff, Jeffrey M.
TI A Dynamic Model of Oligopoly in the Coffee Export Market. **AU** Karp, Larry S.; Perloff, Jeffrey M.

PD June 1993. **TI** Tariffs and Quotas that Lower Prices and Raise Welfare. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics Working Paper: 679; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 18. **PR** $7.50. **JE** F13, D61. **KW** Spatial Differentiation.

AB An increase in a tariff or a reduction in a quota may lower prices and raise welfare in markets with spatially differentiated products. These results are illustrated using a standard spatial model with linear disutility or transportation costs. A higher tariff or smaller quota causes the foreign firm to sell fewer units to those customers who most value its product. Regardless of market structure, the domestic firm may find it profitable to lower its price to capture the customers who previous purchased from the foreign firm. The reduction in the domestic price may be sufficient for welfare to rise from an increase in a tariff under any market structure bounded between Bertrand and collusion.

Pesaran, M. Hashem
PD March 1993. **TI** Equilibrium Asset Pricing Models and Predictability of Excess Returns. **AU** Pesaran, M. Hashem; Potter, Simon M. **AA** Pesaran: University of Cambridge and University of California, Los Angeles. Potter: University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 693; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 29. **PR** $5.00; checks payable to U.C. Regents.

JE G12, E44, G14. **KW** Stochastic Discount Factors. Negative Excess Returns.

AB This paper considers the types of unobservable stochastic discount factors and economic structures that are compatible with a prediction of negative excess returns. Under fundamental pricing for stocks and assuming the existence of a safe asset, sufficient conditions for the conditional expectations of excess returns to be negative are derived. The paper also provides illustrations of the force of these conditions by investigating the properties of the expected excess return function in the case of a number of representative agent asset pricing models familiar in the literature. Finally, using a specification derived from a particular representative agent asset pricing model with minimal restrictions on preferences, we present new evidence on the statistical significance of predictions of negative excess returns for the value weighted CRSP stock index.

Pesendorfer, Wolfgang
PD May 1993. **TI** Design Innovation and Fashion Cycles. **AA** Northwestern University. **SR** Northwestern University Center for Mathematical Studies in Economics and Management Science Discussion Paper: 1049; Northwestern University, 2001 Sheridan Road, 3-014 Leverone Hall, Evanston, IL 60208-2014. **PG** 31. **PR** $3.00 in U.S. and Canada; $5.00 via international mail; $2.00 for local Northwestern faculty/students. **JE** D21, L12, O31. **KW** Durables Goods. Monopoly.

AB A model of fashion cycles is developed in which fashion is used as a signaling device in a "dating-game". We assume that there is a designer (monopolist) who can create new designs at a positive fixed cost and zero marginal cost. Designs are durable commodities. We show the existence of equilibria of the following form: Every T periods a new design is innovated. Over time the price of the design falls and it spreads to more and more agents. Once sufficiently many agents own the design it is profitable to create a new design and a new fashion cycle begins. We also examine the case when there is competition among potential designers and show that there are equilibria in which fashion changes less frequently and the price of fashion remains bounded above the corresponding price in the monopoly case.

Pesteau, Pierre
TI Optimal Intergenerational Transfers in an Endogenous Growth Model with Fertility Changes. **AU** Marchand, Maurice; Michel, Philippe; Pesteau, Pierre.

Peters, Wolfgang
TI Double Inefficiency in Optimally Organized Firms. **AU** Bos, Dieter; Peters, Wolfgang.

TI Income Taxation and Voluntary Provision of Public Goods-Some Counterintuitive Results. **AU** Nett, Lorenz; Peters, Wolfgang.

Peters-Fransen, Ingrid
PD November 1992. **TI** Endogenous Property Rights: The "Coase Assumption" and Smoking Regulation. **AA** University of Western Ontario. **SR** University of Western Ontario Papers in Political Economy: 32; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 18.

PR no charge. **JE** D62. **KW** Externalities. Government Regulation.
AB There are two alternative approaches to internalizing externalities. The Coasian approach provides a solution for small-numbers local externalities and the Pigouvian approach addresses widespread externalities. If negotiation in response to an externality improves resource allocation, a Pigouvian solution in addition may be too much of a good thing; this assumes, however, that the negotiation includes all affected parties. If an externality has both local and widespread dimensions, and small groups bargain over the property rights associated with the local externality, the effects of the activities of a small group of agents on the total externality are negligible and government regulation may still be required to alleviate the problems caused by the externality. In this paper, we discuss some effects of government regulation when an activity generates both local and widespread externalities. In particular, we discuss an example of smoking in restaurants.

Phillips, Garry D. A.
TI Second Order Correction by the Bootstrap. **AU** Ip, Wal Cheung; Phillips, Garry D. A.

Phillips, Peter C. B.
PD May 1993. **TI** Fully Modified Least Squares and Vector Autoregression. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 1047; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 50. **PR** no charge. **JE** C32, C13. **KW** Cointegration. Hyperconsistency. Unit Roots.
AB Fully modified least squares (FM-OLS) regression was originally designed in work by Phillips and Hansen (1990) to provide optimal estimates of cointegrating regressions. The method modifies least squares to account for serial correlation effects and for the endogeneity in the regressors that results from the existence of a cointegrating relationship. Recent work by the author (1992) has shown that FM-OLS regression produces estimates of unit root in time series regression that are hyperconsistent in the sense that their rate of convergence exceeds that of the OLS estimator. That result is extended here to multivariate unit root models and models with deterministic trends, where it is shown that estimates of the trend coefficients are also hyperconsistent. The paper provides a general framework which makes it possible to study the asymptotic behavior of FM-OLS in models with full rank I(1) regressors, models with I(1) and I(0) regressors, models with unit roots, models with only stationary regressors and models with I(1) and I(0) regressors as well as deterministic trends.

Picard, P.
TI Competing Vertical Structures: Precommitment and Renegotiation. **AU** Jullien, B.; Caillaud, B.; Picard, P.

Pippenger, John
TI Testing for Cointegration with Transaction Costs: The Case of the Law of One Price. **AU** Mastroyiannis, Tasos; Pippenger, John.

Plott, Charles R.
TI General Equilibrium, Macroeconomics and Money in a Laboratory Experimental Environment. **AU** Lian, Peng; Plott, Charles R.

Pochet, Yves
PD March 1993. **TI** Polyhedra for Lot-Sizing with Wagner-Whitin Costs. **AU** Pochet, Yves; Wolsey, Laurence A. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9310; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 26. **PR** not available. **JE** C63. **KW** Lot Sizing. Polyhedra.
AB We examine the single-item lot-sizing problem with Wagner-Whitin costs over an n period horizon, i.e. $p(t) + h(t)$ is greater than or equal to $p(t+1)$ for $t=1,...,n-1$, where $p(t)$, $h(t)$ are the unit production and storage costs in period t respectively, so it always pays to produce as late as possible. We describe integral polyhedra whose solutions as linear programs solve the uncapacitated problem (ULS), the uncapacitated problem with backlogging (BLS), the uncapacitated problem with start-up costs (ULSS) and the constant capacity problem (CLS), respectively. The polyhedra, extended formulations and separation algorithms are much simpler than in the general cost case. For (CLS) and (BLS) no explicit polyhedral descriptions are known for the general case in the original space.

Porath, Elchanan Ben
PD January 1993. **TI** On the Relationship Between Mutation Rates and Growth Rates in a Changing Environment. **AU** Porath, Elchanan Ben; Dekel, Eddie; Rustichini, Aldo. **AA** Porath: Tel Aviv University and Northwestern University. Dekel: University of California, Berkeley and Tel Aviv University. Rustichini: New York University and Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9302; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 15. **PR** not available. **JE** D83, C73. **KW** Evolution. Learning. Population Growth.
AB In recent dynamic models of learning and evolution a rate of mutation is usually assumed to be fixed. In this paper we use an evolutionary model to examine how the outcome of the dynamic process depends on the rate of change. In particular we examine how the long run growth rate of the population depends on the mutation rate. Insofar as evolutionary forces are likely to select mutation rates that maximize the population growth rate, our analysis sheds light on what rates of change might evolve.

Porteous, David
TI Monetary Integration in Historical Perspective. **AU** Hamada, Koichi; Porteous, David.

Porter, Robert H.
TI Optimal Selling Strategies for Oil and Gas Leases with an Informed Buyer. **AU** Hendricks, Kenneth; Porter, Robert H.; Tan, Guofu.

Postlewaite, Andrew
TI Depth of Knowledge and the Effect of Higher Order Uncertainty. **AU** Morris, Stephen; Postlewaite, Andrew; Shin, Hyun Song.

TI Relative Income Concerns and the Rise in Married Women's Employment. **AU** Neumark, David; Postlewaite, Andrew.

Potter, Simon M.

PD March 1993. **TI** A Nonlinear Approach to U.S. GNP.
AA University of California, Los Angeles. **SR** University
of California at Los Angeles Department of Economics
Working Paper: 692; Department of Economics, University of
California at Los Angeles, 2263 Bunche, Los Angeles, CA
90024. **PG** 22. **PR** $5.00; checks payable to U.C.
Regents. **JE** C22, E37, E32. **KW** Business Cycles.
Nonlinear Model.
AB A univariate nonlinear model is estimated for U.S. GNP
that on many criteria outperforms standard linear models. The
estimated model is of the threshold autoregressive type and
contains evidence of asymmetric effects of shocks over the
business cycle. In particular the nonlinear model suggests that
the post-1945 U.S. economy is significantly more stable than
the pre-1945 U.S. economy.

TI Equilibrium Asset Pricing Models and Predictability of
Excess Returns. **AU** Pesaran, M. Hashem; Potter, Simon M.

Powell, Lisa M.

TI A First Nations Province. **AU** Courchene, Thomas J.;
Powell, Lisa M.

Pradhan, Vijay

TI Marketing California Cotton: An Economic and Policy
Overview. **AU** Siebert, Jerome B.; Klonsky, Karen; Pradhan,
Vijay.

Price, Lydia

PD November 1992. **TI** Identifying Cluster Overlap with
NORMIX Population Membership Probabilities.
AA INSEAD. **SR** INSEAD Working Papers: 92/73/MKT;
INSEAD, Boulevard de Constance, Fontainebleau, 77305
Cedex, FRANCE. **PG** 32. **PR** not available. **JE** C82.
KW Overlapping Populations. Clustering.
AB Prior research has suggested that the NORMIX clustering
procedure performs poorly under conditions of cluster overlap.
In each previous study, however, the criterion of clustering
accuracy specified that an entity be assigned to the single
population from which it was sampled. NORMIX population
membership probabilities were used for this purpose by
assigning entities to the single population of highest
probability. It is argued in this research that, when populations
overlap, a more appropriate criterion of accuracy would
recognize that entities which fall in the overlapping regions of
populations either belong to multiple populations or they
belong to a single population whose identity is indeterminate. It
is further argued that NORMIX probabilities can be useful in
identifying the entities from such overlapping regions. The
results of a Monte Carlo test support this argument.

Prisbrey, Jeffrey E.

TI Anomalous Behavior in Linear Public Goods
Experiments: How Much and Why? **AU** Palfrey, Thomas R.;
Prisbrey, Jeffrey E.

Probst, Daniel A.

PD December 1992. **TI** Evolution, Automata and the
Repeated Prisoners' Dilemma. **AA** University of Bonn and
London School of Economics. **SR** Universitat Bonn
Sonderforschungsbereich 303 - Discussion Paper: B-232;
Sonderforschungsbereich 303 an der Universitat Bonn,
Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND.
PG 18. **PR** no charge. **JE** C72, C73, C62.
KW Evolutionary Games. Evolutionary Stability. Repeated
Games.
AB This paper introduces two ideas to the evolutionary
analysis of the Abreu & Rubinstein automation selection game
(with complexity costs) for the repeated prisoners' dilemma. As
a first point an evolutionary process with a constant influx of
simple mutants is proposed. The second idea introduces an
evolutionary stability concept for sets of automata. These sets
consist of automata which are indistinguishable in an
evolutionary process in terms of repeated game payoff and
complexity. Stability of such a set requires every member to be
evolutionarily stable against all automata outside the set. The
basic aim is to remedy the non-existence of ESS by allowing an
equilibrium population to drift arbitrarily over a set while
requiring that this drift will never allow the destabilization of
the population by any mutants outside this set. It turns out that
there exists one unique set of five three-state automata fulfilling
the above requirements.

Proenca, Isabelle

PD February 1993. **TI** On the Performance of the H-H
Test. **AA** Universite Catholique de Louvain.
SR Universite Catholique de Louvain CORE Discussion
Paper: 9305; Universite Catholique de Louvain, Voie du
Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM.
PG 15. **PR** not available. **JE** C14, C52, C15.
KW Specification Test. Nonparametric Models.
Semiparametric Models.
AB Horowitz and Hardle (1992) proposed a procedure for
testing a parametric model against a semiparametric alternative
(called the H-H test) which is based on the evaluation of
moment conditions following the methodology presented by
Newey (1985). Their approach is related to Bierens (1990) test
to detect any kind of model misspecification also based on
Newey's framework. It is shown that these tests procedures are
consistent (the asymptotic power is equal to 1 in the set of
alternatives). However the absence of information about their
finite sample properties make simulations required to evaluate
their quality on discriminating model misspecification. In this
paper the small sample performance of the H-H test is analized
concerning the empirical power and size by a Monte Carlo
study with single index models. The results are compared with
those obtained using Bierens' test.

Psaradakis, Zacharias

PD February 1993. **TI** The Demand for Money in Greece:
An Exercise in Econometric Modelling with Cointegrated
Variables. **AA** University of Bristol. **SR** University of
Bristol Working Paper: 93/344; Department of Economics,
University of Bristol, 8 Woodland Road, BS8 ITN, ENGLAND.
PG 16. **PR** no charge. **JE** E41, C32.
KW Cointegration. Encompassing. VAR Model.
AB This paper investigates empirically the relationship
between the demand for real money balances and its
determinants in Greece. The relationship under scrutiny is
analyzed in the context of a small system involving money,
prices, income and interest rates, using a recently proposed
modeling strategy based on sequential reduction of a congruent
VAR. Special emphasis is placed on the importance of
obtaining adequate representations of the non-stationary
features of the data, as well as on the necessity of evaluating a

model's adequacy through tests for congruence and encompassing.

TI A Reconciliation of Some Paradoxical Empirical Results on the Expectations Model of the Term Structure. **AU** Driffill, John; Psaradakis, Zacharias; Sola, Martin.

Qin, Cheng-Zhong

PD September 1992. **TI** A Conjecture of Shapley and Shubik. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 2-93; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 12. **PR** no charge. **JE** D51, C71. **KW** Market Game. Inner Core. Competitive Equilibrium.
AB It is shown that for every NTU market game, there is a market that represents the game whose competitive payoff vectors completely fill up the inner core of the game. It is also shown that for every NTU market game and for any point in its inner core, there is a market that represents the game and further has the given inner core point as its unique competitive payoff vector. These results prove a conjecture of Shapley and Shubik.

Quah, Danny

PD March 1993. **TI** A Dynamic Index Model for Large Cross Sections. **AU** Quah, Danny; Sargent, Thomas. **AA** Quah: London School of Economics. Sargent: Stanford University and University of Chicago. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 132; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 22. **PR** no charge. **JE** C13, E32, E24. **KW** Business Cycles. Employment. Estimation.
AB This paper shows how standard methods can be used to formulate and estimate a dynamic index model for random fields - stochastic processes indexed by time and cross section where the time-series and cross-section dimensions are comparable in magnitude. We use these to study dynamic co-movements of sectoral employment in the U.S. economy. The dynamics of employment in sixty sectors is well explained using only two unobservable factors; those factors are also strongly correlated with GNP growth.

Quah, John K.-H

PD April 1993. **TI** Homothetic Preferences, Homothetic Transformations, and the Law of Demand in Exchange Economies. **AA** University of California, Berkeley. **SR** University of California at Berkeley Working Paper in Economics: 93-210; IBER, 156 Barrows Hall, University of California, Berkeley, CA 94720. **PG** 44. **PR** $3.50 U.S.A. and Canada. $7.00 foreign. **JE** D51, C62, C11. **KW** Homothetic Preferences. Tatonnement.
AB There are four parts to this working paper. In the first part, we show that in an exchange economy where all agents have homothetic preferences, and where preferences and endowments are independently distributed, the economy's demand may be represented by a single agent. The proof involves extending an earlier theorem by Eisenberg. In the second part, we show that with additional smoothness assumptions, the economy will satisfy the Restricted Monotonicity Property (RMP), and so have only one equilibrium price. Note that RMP could be thought of as a restricted form of the Law of Demand. RMP also guarantees

that the equilibrium price will be stable under some plausible tatonnement processes, these will be discussed in the third part. Finally, we will be considering a sequence of exchange economies without homothetic preferences, but with "increasing heterogeneity." We show that increasing heterogeneity will guarantee that the sequence eventually satisfies RMP.

Quandt, Richard E.

TI The Kornai Effect with Partial Bailouts and Taxes. **AU** Magee, Karen L.; Quandt, Richard E.

TI The Predictability of Stock Returns and the Efficient Market Hypothesis. **AU** Fluck, Zsuzsanna; Malkiel, Burton G.; Quandt, Richard E.

Queyranne, Maurice

TI An Exact Algorithm for Maximum Entropy Sampling. **AU** Ho, Chun-Wa; Lee, Jon; Queyranne, Maurice.

Rabin, Matthew

PD May 1993. **TI** Deviations, Dynamics and Equilibrium Refinements. **AU** Rabin, Matthew; Sobel, Joel. **AA** Rabin: University of California, Berkeley. Sobel: University of California, San Diego. **SR** University of California at Berkeley Working Paper in Economics: 93-211; IBER, 156 Barrows Hall, University of California, Berkeley, CA 94720. **PG** 28. **PR** $3.50 U.S.A. and Canada. $7.00 foreign. **JE** C72, C73, C62. **KW** Recurrent Equilibrium. Refinements.
AB Many standard solution concepts rule out those Nash equilibria that are susceptible to deviations. We propose a framework for considering not only which equilibria are not susceptible to deviations, but also which equilibria are likely to persist in the long run because they are repeatedly deviated to. We call such equilibria recurrent. We explore which equilibria are recurrent based on the deviations underlying each of several prominent signaling refinements. We show that the set of recurrent equilibria based on Cho and Krep's (1987) intuitive criterion and Kohlberg and Mertens' (1986) NWBR criterion are precisely what those papers already predict. In contrast, we show that applying our framework to cheap-talk refinements proposed by Farrell (1993) and Matthews, Okuno-Fujiwara, and Postlewaite (1991) can 1) make those solution concepts more realistic, 2) guarantee existence, and 3) guarantee meaningful communication in at least one class of games where it is not guaranteed by either Farrell or MOP.

TI Loss Aversion in a Savings Model. **AU** Bowman, David; Minehart, Debby; Rabin, Matthew.

Ramaswamy, Ramana

PD March 1993. **TI** Centralized Bargaining, Efficiency Wages, and Flexibility. **AU** Ramaswamy, Ramana; Rowthorn, Robert. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/25; International Monetary Fund, Washington, DC 20431. **PG** 17. **PR** not available. **JE** J41, J31. **KW** Wage Bargaining.
AB The main focus of the "wage bargaining" literature has been on the factors promoting real wage flexibility at the macro level. This paper, in contrast, examines the microeconomic issues of wage bargaining. More specifically, this paper appraises the following questions: (a) What are the conditions

under which a firm prefers decentralized to centralized bargaining?, (b) What are the characteristic features of firms which prefer decentralized to centralized bargaining?, and (c) Has the proportion of firms which prefer decentralized bargaining increased over time? These questions are examined in an efficiency wage model with insider-outsider features. This paper provides useful theoretical insights for understanding the issues involved in shifting from centralized to decentralized wage bargaining.

Rao, H. Raghav
TI Indonet: A Public Service Data Network in India.
AU Rau, P. Raghavendra; Rao, H. Raghav.

Rau, P. Raghavendra
PD not available. **TI** Indonet: A Public Service Data Network in India. **AU** Rau, P. Raghavendra; Rao, H. Raghav. **AA** Rau: INSEAD. Rao: State University of New York, Buffalo. **SR** INSEAD Working Papers: 93/18/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 16. **PR** not available. **JE** L86. **KW** Information Technology. Electronic Networks.
AB Networking, both within and between organizations, is becoming increasingly important today. Questions on the ownership of electronic networks, the degree of competition to be allowed in setting up networks, the degree of accessibility allowed to non-member organizations, have all become important issues, in fields ranging from industrial organization to information technology. This paper will describe the attempt to develop a public-service data network - the INDONET network - in India. The paper describes the development and operation of the INDONET network - its inception, stages in development, its customers, competitive environment and relative successes and failures in meeting its objectives. It also reports outside opinions from managers of organizations which do not use INDONET and includes a mini-case study of one such organization - a multinational bank, which has developed its own parallel competing network.

Rauch, James E.
PD April 1993. **TI** Does History Matter Only When It Matters Little? The Case of City-Industry Location. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4312; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** R33, R14, D21, O14. **KW** Industrial Parks. Land Price Discrimination. Agglomeration.
AB When will an industry subject to agglomeration economies move from an old, high-cost site to a new, low-cost site? It is argued that history, in the form of sunk costs resulting from the operation of many firms at a site, creates a first-mover disadvantage that can prevent relocation. It is demonstrated that developers of industrial parks can partly overcome this inertia through discriminatory pricing of land over time, and empirical evidence is provided that they actually engage in such behavior. It is also shown that other aspects of developer land-sale strategy can be a source of information on the nature of interfirm externalities.

Raut, Lakshmi K.
TI Theories of Long-Run Growth: Old and New.

AU Srinivasan, T. N.; Raut, Lakshmi K.

Ravenscraft, David J.
TI LBO's, Debt and R&D Intensity. **AU** Long, William F.; Ravenscraft, David J.

Ravn, Morten O.
PD June 1992. **TI** Testing Exogeneity of the Solow Residuals in Three European Countries. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1993-6; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 10. **PR** no charge. **JE** E32, O33. **KW** Technology Shocks. Business Cycles.
AB In this paper we test whether Solow residuals for the U.K., France and Denmark, derived in the usual fashion as the rate of change in inputs times their income shares, are exogenous. We do this by testing exogeneity of the innovations to this process to a number of exogenous instruments. That hypothesis can be rejected at any normal level of significance. In particular, we find that the innovations to the Solow residuals are non-orthogonal to the terms of trade for all economies.

Razin, Assaf
PD March 1993. **TI** Interactions Between International Migration and International Trade: Positive and Normative Aspects. **AU** Razin, Assaf; Sadka, Efraim. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 4/93; Department of Economics, Tel Aviv University, Ramat Aviv 69978, ISRAEL. **PG** 30. **PR** no charge. **JE** F22, F12, F35, F02. **KW** Labor Mobility. Foreign Aid.
AB Under relative factor endowment theory international trade and international migration are perfect substitutes. If this theory is empirically valid, then an access to the world market could alleviate migration pressures in the former East European countries. Cross country differences in productivity, however, imply that international migration can be a complement to international flows of commodities. In this case an access to external market will heighten migration pressures. The modern welfare state typically redistribute income from the rich to the poor in a way which attracts poor migrants from the less developed countries. Since migration could impose a toll on the redistribution policy of the Developed Country it may benefit from the extension of foreign aid to the Less Developed Country if this aid serves to finance a subsidy to workers in the Less Developed Country, thereby containing migration.

PD April 1993. **TI** The Dynamic-Optimizing Approach to the Current Account: Theory and Evidence. **AA** Tel Aviv University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4334; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** $5.00. **JE** F32, D90. **KW** Intertemporal Substitution. Intertemporal Optimization.
AB The past decade has witnessed the development of a large theoretical literature on the intertemporal approach to the current account. These models typically emphasized the effects on the current account balance of real factors such as productivity, terms of trade, government spending and taxes via intertemporal substitution in consumption, production and investment. Could this micro based theory in any meaningful

sense be wrong? The answer lies in the efforts to derive its empirical implications. Essentially the test of this theory is in proving the empirical importance of the role played by the intertemporal substitution. While this paper does not engage in formal statistical testing of the theory, the numbers it presents and the analysis of them shed light on the validity of the key testable hypotheses. The paper models investment and consumption (saving) in ways that emphasize intertemporal optimization and the differing effects of various shocks. The evidence supports of the key propositions of the dynamic-optimizing approach.

PD   April 1993. TI   Convergence in Growth Rates: A Quantitative Assessment of the Role of Capital Mobility and International Taxation. AU   Razin, Assaf; Yuen, Chi-Wa. AA   Razin: Tel Aviv University and National Bureau of Economic Research. Yuen: Hong Kong University of Science and Technology. SR   National Bureau of Economic Research Working Paper: 4336; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   19. PR $5.00. JE   F21, O19, F43, F47. KW   Population Growth. Income Growth.

AB   We provide an exploratory quantitative analysis of the role of capital mobility and international taxation in explaining the observed cross-country diversity in the long-run rates of growth of per capita and total incomes as well as the population growth rates. Corroborative evidence is found for the theoretical results on the convergence/divergence in long-term population, per capita and total income growth rates obtained in Razin and Yuen (1992). In particular, the data (and casual observations) show that (1) population growth and per capita income growth are negatively correlated across countries, (2) the total income growth rates are less variable than the per capita income growth rates across countries, and (3) asymmetry in capital income tax rates, coupled with the residence principle of international income taxation, can be an important source of cross-country differences in per capita income growth.

Reiter, Stanley
TI   Essential Revelation Mechanisms and Computational Complexity. AU   Mount, K. R.; Reiter, Stanley.

Rey, P.
PD   January 1992. TI   Long-Term, Short-Term and Renegotiation: On the Value of Commitment with Asymmetric Information. AU   Rey, P.; Salanie, B. AA   INSEE. SR   Unite de Recherche Document de Travail ENSAE/INSEE: 9304; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG   52. PR   no charge. JE   L14, D82. KW   Contracts. Adverse Selection. Spot Contracts.

AB   In a previous paper, we have shown that, under symmetric information, a long-term optimum can be implemented through a sequence of overlapping short-term contracts, each covering only a limited number of periods; similarly, other contributions have analyzed implementation through credit or spot contracts. We analyze here situations of asymmetric information and show that the optimal renegotiation-proof long-term contract can still be implemented through overlapping short-term contracts. It can also be implemented through spot contracting, but only under more restrictive assumptions than in the case of symmetric information.

TI   Renegotiation Design with Unverifiable Information. AU   Aghion, P.; Dewatripont, M.; Rey, P.

Risager, Ole
PD   March 1993. TI   Labour Substitution in Construction and the Metal Industry in Denmark. AA   University of Aarhus. SR   Aarhus Institute of Economics Memo: 1993-13; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. PG   16. PR   no charge. JE   L61, L74, J23. KW   Skilled Labor. Cointegration.

AB   This paper applies the Johansen cointegration technique to investigate the degree of substitutability between skilled and unskilled labor in construction and the metal industry in Denmark. For construction I find a high degree of labor substitutability. Factor prices are weakly exogenous so the results are consistent with the simple neoclassical model. In the metal industry relative employment and factor prices also cointegrate. The substitution elasticity is close to zero and a formal test of this hypothesis shows that it cannot be rejected. If true, this suggests a Leontief production technology or rigid working and contracting practices that prevent an adjustment of relative employment to relative wage changes, or vice versa.

PD   April 1993. TI   On the Asymmetric Effects of Cost and Benefit Uncertainty in a Model of Irreversible Investment. AA   University of Aarhus. SR   Aarhus Institute of Economics Memo: 1993-15; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. PG   15. PR   no charge. JE   D81, E22. KW   Risk Aversion. Cost Uncertainty.

AB   This paper analyzes the effects of cost and benefit uncertainty in a model of irreversible investment due to McDonald and Siegel (1986). The analysis shows that it is important to distinguish between cost and benefit uncertainty under risk aversion. Moreover, the numerical simulations, based on standard parameter values, underscore this point. Thus, a rise in cost uncertainty has quantitatively a much more depressive investment effect than a rise in benefit uncertainty.

Robert, C.
TI   New   Perspectives   on   Linear   Calibration. AU   Kubokawa, T.; Robert, C.

PD   April 1993. TI   New Perspectives on Linear Calibration. AA   Universite de Rouen. SR   Unite de Recherche Document de Travail ENSAE/INSEE: 9320; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris Cedex 14, FRANCE. PG   16. PR   no charge. JE   C11, C13, C15. KW   Prior Feedback. Maximum Likelihood Estimation.

AB   We provide in this paper a Bayesian derivation of maximum likelihood estimators in exponential families through a method called Prior Feedback. This method iteratively replaces one hyperparameter of a conjugate prior by the corresponding posterior quantity until a fixed point is attained. The derived estimator then converges to the maximum likelihood estimator when the precision of the prior goes to infinity. We deduce from this result a practical alternative to compute maximum likelihood estimators in exponential families in cases where a direct derivation is impossible. We illustrate the interest of Prior Feedback through several introductory examples and relate it to simulated annealing. This method can also be modified for estimation in mixture distributions (and other missing data models).

Robertson, Donald

PD March 1993. **TI** Five Weeks in the Life of the Pound: Interest Rates, Expectations and Sterling's Exit from the ERM. **AU** Robertson, Donald; Symons, James. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 133; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 11. **PR** no charge. **JE** E43, F31. **KW** Term Structure. Exchange Rate Regime.
AB Yields to maturity of a set of nominal and index linked gilts are used to obtain estimates of the term structures of nominal and real interest rates. These also allow calculation of expected inflation. The estimation is performed for a period of five weeks including the date of sterling's exit from the ERM. We look at the macroeconomic consequences of the shift in the exchange rate regime as implied by the behavior of financial markets, and how those markets incorporate new information.

Robinson, Sherman

TI Wage Changes in a U.S.-Mexico Free Trade Area: Migration Versus Stolper-Samuelson Effects. **AU** Burfisher, Mary E.; Robinson, Sherman; Thierfelder, Karen E.

PD April 1993. **TI** A Regional, Environmental, Computable General Equilibrium Model of the Los Angeles Basin. **AU** Robinson, Sherman; Subramanian, Shankar; Geoghegan, Jacqueline. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics Working Paper: 646; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 22. **PR** $11.75. **JE** Q25, Q28, C68, D57. **KW** Air Pollution. Emission Charges.
AB This paper describes a regional, environmental, multisectoral, computable general equilibrium (CGE) model for the Los Angeles basin. The model, which has 17 sectors, is used to investigate the economic impacts and policy implications of instituting a marketable permit system to reduce air pollution in Los Angeles. The model includes three pollutants (nitrogen oxides, sulfur dioxide, and reactive organic gases) which are emitted according to fixed sectoral coefficients. In the current version, the model does not include any abatement technology. We first measure the direct and indirect pollution effects resulting from changes in final demand using input-output analysis. We then use the CGE model to analyze the impact of imposing emission charges for the three pollutants in order to move toward mandated emission targets. We find that total emission charges required to approach the targets are quite large, indicating a large potential market for emission permits.

Rodrigues, Kim

TI Proceedings of the Panel Discussion on Property Rights. **AU** Wallace, L. Tim; Moles, Jerry; Rodrigues, Kim.

Rodriguiez-Poo, Juan M.

PD October 1992. **TI** Estimating the Time-of-Day Electricity Demand by Using the Constrained Smoothing Spline Estimator. **AA** Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9254; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 27. **PR** not available. **JE** C13, C14, Q41.
KW Nonparametric Estimation. Electricity Demand.
AB The study of the time-of-day electricity demand motivates the introduction of a new class of nonparametric estimators: the constrained smoothing spline estimator. We compare the results obtained with this estimator against the classical Fourier and smoothing splines estimates.

Roemer, John E.

PD June 1993. **TI** Limited Privatization in the Presence of Public Bads. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-13; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 25. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** D62, L33, D52, D58. **KW** Market Socialism. Stock Markets. Externalities.
AB This paper contrasts the general equilibrium welfare effects of "straight privatization," when the ownership of formerly state firms is distributed on a per capita basis and trading of shares on a stock market follows, with a "limited privatization" proposal. In the latter, shares are also initially equally distributed to adult citizens in the form of coupons, and trade can take place on a coupon stock market, where prices of shares are quoted only in coupons, not roubles (the money currency). The coupon economy is, in fact, isomorphic to the capitalist economy with one market missing - the one that allows traders to exchange coupons for roubles. The key aspect of the economic environment is the presence of a public bad (pollution), which increases the profitability of firms but which citizens dislike. The level of the public bad is set by the electorate, and influences the economic activity on the stock market. It is shown that the coupon equilibrium can be better for the majority of the population than the equilibrium with straight privatization.

Rogerson, Richard

TI Keeping People Out: Income Distribution, Zoning and the Quality of Public Education. **AU** Fernandez, Raquel; Rogerson, Richard.

Rogoff, Kenneth

TI Global versus Country-Specific Productivity Shocks and the Current Account. **AU** Glick, Reuven; Rogoff, Kenneth.

Rolin, Jean-Marie

PD December 1992. **TI** On the Distribution of Jumps of the Dirichlet Process. **AA** Institut de Statistique and CORE. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9259; Universite Catholique de Louvain Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 28. **PR** not available. **JE** C11, C14, C15. **KW** Bayesian Analysis. Nonparametric Analysis.
AB In this paper, a new and very easily tractable description of the Dirichlet process with diffuse parameter is presented. This description permits to simulate the posterior distribution of the nonparametric Bayesian Statistical Analysis of an i.i.d. sample.

Romer, Christina D.

TI Historical Perspectives on the Monetary Transmission Mechanism. **AU** Miron, Jeffrey A.; Romer, Christina D.; Weil, David N.

Rosenthal, Patrice
TI Industrial Relations in Greenfield Sites. AU Guest, David; Rosenthal, Patrice.

Rostowski, Jacek
PD April 1993. TI Creating Stable Monetary Systems in Post-Communist Economies. AA London School of Economics, University of London and Centre for Research into Communist Economies. SR London School of Economics Centre for Economic Performance Discussion Paper: 141; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 33. PR no charge. JE G21, E51, E52, P34. KW Economic Transition. Banks. Credit Allocation.
AB The primary function of banks during economic transformation is seen to be provision of an efficient payments mechanism. The lack of banking skills, particularly in credit allocation, is seen as the major problem in achieving stable monetary systems. This is a problem which can be expected to last many years. The solution is to limit banks to very safe assets (initially central bank liabilities). Combining such safe banks with a monetary rule would provide stable monetary systems during transition.

PD April 1993. TI The Inter-Enterprise Debt Explosion in the Former Soviet-Union: Causes, Consequences, Cures. AA London School of Economics, University of London and Centre for Research into Communist Economies. SR London School of Economics Centre for Economic Performance Discussion Paper: 142; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 43. PR no charge. JE E51, E63. KW Economic Transition. Credit. Monetary Policy.
AB The reasons for the growth of inter-enterprise debt are analyzed. It is suggested that it results mainly from the appearance of normal trade credit in a liberalized economy, and when a monetary squeeze is part of a non-credible stabilization attempt. In the latter case the result can be a sharp fall in output. Non-market and market solutions to this problem are analyzed, and the advantages of the latter over the former are stressed.

Roubini, Nouriel
TI Excessive Deficits: Sense and Nonsense in the Treaty of Maastricht. AU Buiter, Willem H.; Corsetti, Giancarlo; Roubini, Nouriel.

Rowthorn, Robert
TI Centralized Bargaining, Efficiency Wages, and Flexibility. AU Ramaswamy, Ramana; Rowthorn, Robert.

Rubinstein, Ariel
TI Simplicity of Solution Concepts: Subgame Perfect Equilibrium in Extensive Games vs. Iteratively Undominated Strategies in Normal Games. AU Glazer, Jacob; Rubinstein, Ariel.

Rustichini, Aldo
TI On the Relationship Between Mutation Rates and Growth Rates in a Changing Environment. AU Porath, Elchanan Ben; Dekel, Eddie; Rustichini, Aldo.

PD May 1993. TI Learning About Variable Demand in the Long Run. AU Rustichini, Aldo; Wolinsky, Asher. AA Rustichini: New York University. Wolinsky: Northwestern University. SR Universite Catholique de Louvain CORE Discussion Paper: 9317; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. PG 8. PR not available. JE D42, D82. KW Monopoly. Demand Uncertainty.
AB This paper studies the problem of a monopoly which is uncertain about the demand it faces and learns about it over time through its pricing experience. The demand curve facing the monopoly is not constant - it changes over time in a Markovian fashion. We characterize the monopoly's optimal policy and inquire how it differs from an informed monopoly's policy. It turns out that, even when the rate at which the demand varies is negligible, the stationary probability with which the monopoly's policy deviates from its informed counterpart is non-negligible, as long as the discount factor is below 1.

Ruttan, Vernon W.
TI Induced Technical and Institutional Change Evaluation and Reassessment: Two Chapters. AU Hayami, Yujiro; Ruttan, Vernon W.

Ruud, Paul A.
TI Nonparametric Multivariate Regression Subject to Constraint. AU Goldman, Steven M.; Ruud, Paul A.

Ryterman, Randi
TI Departures from the Ruble Zone: The Implications of Adopting Independent Currencies. AU Goldberg, Linda S.; Ickes, Barry W.; Ryterman, Randi.

Saa-Requejo, Jesus
TI Exchange Rate and Term Structure Dynamics and the Pricing of Derivative Securities. AU Nielsen, Lars Tyge; Saa-Requejo, Jesus.

Sadka, Efraim
TI Interactions Between International Migration and International Trade: Positive and Normative Aspects. AU Razin, Assaf; Sadka, Efraim.

Sakr, Khaled
PD March 1993. TI Determinants of Private Investment in Pakistan. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/93/30; International Monetary Fund, Washington, DC 20431. PG 18. PR not available. JE E22, O16. KW Government Investment.
AB This paper investigates the determinants of private investment in Pakistan with special emphasis on the impact of government investment. Using annual data for the period 1973/74-1991/92, it is estimated that private investment was positively correlated to GDP growth, to credit extended to the private sector, and to government investment. When government investment is disaggregated into its infrastructural and noninfrastructural components, the latter is found to be negatively correlated with private investment.

Salanie, B.
TI Long-Term, Short-Term and Renegotiation: On the Value

of Commitment with Asymmetric Information. **AU** Rey, P.; Salanie, B.

TI Simulation-Based Estimation of Models with Lagged Latent Variables. **AU** Laroque, G.; Salanie, B.

Samuelson, Larry
TI Duopoly Signal Jamming. **AU** Mirman, Leonard J.; Samuelson, Larry; Urbano, Amparo.

TI Normal Form Structures in Extensive Form Games. **AU** Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen M.

TI Normal Form Structures in Extensive Form Games. **AU** Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen M.

TI Structural Indifference in Normal Form Games. **AU** Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen M.

TI Structural Indifference in Normal Form Games. **AU** Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen M.

Sargent, Thomas
TI A Dynamic Index Model for Large Cross Sections. **AU** Quah, Danny; Sargent, Thomas.

Saunders, Anthony
PD March 1993. **TI** Contagious Bank Runs: Evidence From the 1929-1933 Period. **AU** Saunders, Anthony; Wilson, Berry. **AA** Saunders: New York University. Wilson: Georgetown University. **SR** New York University Salomon Brothers Working Paper: S-93-16; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 18. **PR** not available. **JE** G21, N22, G14. **KW** Bank Failure. Depositor Discipline. Great Depression.
AB This paper analyzes the behavior of deposity flows in failed banks and (a control) sample of non-failed banks over the 1929-1933 period. Evidence of significant contagion effects was found for the 1930-1932 period. No apparent contagion effects existed in 1929 or 1933. It was also found that the pace of contagion accelerated between 1929 and 1932 indicative of a learning effect among depositors. Interestingly, even in the period of contagion there were a significant number of informed depositors who could distinguish among ex-ante good and ex-ante bad banks. This is despite the fact that this period preceded the establishment of the FDIC and SEC and their associated information production requirements for banks. Finally, our results suggest that in the pre-1933 period there was a significant amount of depositor discipline on bad banks.

Sayers, Chera L.
TI Is Chaos Generic in Economic Data? **AU** Jaditz, Ted; Sayers, Chera L.

Schaller, Huntley
TI Bubbles, Fundamentals, and Investment: A Multiple Equation Testing Strategy. **AU** Chirinko, Robert S.; Schaller, Huntley.

Scharfstein, David S.
TI Optimal Debt Structure with Multiple Creditors. **AU** Bolton, Patrick; Scharfstein, David S.

Schiff, Jerald
TI Economic Consequences of Lower Military Spending: Some Simulation Results. **AU** Bayoumi, Tamim A.; Hewitt, Daniel P.; Schiff, Jerald.

Schmeidler, David
TI Case-Based Optimization. **AU** Gilboa, Itzhak; Schmeidler, David.

Schuermann, Til
TI Exact Maximum Likelihood Estimation of ARCH Models. **AU** Diebold, Francis X.; Schuermann, Til.

Schultz, T. Paul
TI An Event History Analysis of Divorce in China. **AU** Zeng, Yi; Schultz, T. Paul; Wang, Deming.

Schwert, G. William
TI Poison or Placebo? Evidence on the Deterrent and Wealth Effects of Modern Antitakeover Measures. **AU** Comment, Robert; Schwert, G. William.

Segal, Uzi
TI Dynamic Consistency Implies Approximately Expected Utility Preferences. **AU** Border, Kim C.; Segal, Uzi.

Sen, Arunava
TI Implementation in Generic Environments. **AU** Bergin, James; Sen, Arunava.

Serrano, Roberto
TI Multilateral Bargaining with Imperfect Information. **AU** Baliga, Sandeep; Serrano, Roberto.

PD June 1993. **TI** Decentralized Markets with Pairwise Meetings: Recent Developments. **AU** Serrano, Roberto; Yosha, Oved. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 93-32; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 17. **PR** no charge. **JE** C78, D83. **KW** Search. Bargaining. Bilateral Trade.
AB We discuss recent developments in the economies of bargaining and search in markets, and their relation to the older literature on centralized (planned) and decentralized markets. In particular, we address questions such as delay in trade, equilibrium price distributions, transmission of information, and efficiency. This new line of research may improve our understanding of how markets work, and may be of help in the design of trading institutions.

Sevy, David
PD February 1993. **TI** The Provision of Information on a Market with Vertically Differentiated Goods. **AA** Ecole Polytechnique, Paris. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9304; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 15. **PR** not available. **JE** L13, L15. **KW** Product Quality. Duopoly. Vertical Differentiation.

AB This note incorporates vertical differentiation into a two-stage model constructed by Ireland (1992), in which duopolistic firms first choose a costless provision of information and then compete in prices. Partial information still occurs at equilibrium, to ensure positive expected profits. For quality differentials above a threshold value, there remains only one pure strategy Nash equilibrium with the best firm informing the whole market; increasing quality harms consumers by depriving them of more surplus.

Sexton, Terri A.
TI Property Taxes, Mobility, and Home Ownership. **AU** O'Sullivan, Arthur; Sexton, Terri A.; Sheffrin, Steven M.

Shadbegian, Ronald J.
TI Environmental Regulation and Manufacturing Productivity at the Plant Level. **AU** Gray, Wayne B.; Shadbegian, Ronald J.

Shaw, Daigee
TI Measuring the Impact of Global Warming on Agriculture. **AU** Mendelsohn, Robert; Nordhaus, William D.; Shaw, Daigee.

Sheffrin, Steven M.
TI Property Taxes, Mobility, and Home Ownership. **AU** O'Sullivan, Arthur; Sexton, Terri A.; Sheffrin, Steven M.

Sheiner, Louise
TI Policy Options for Long-Term Care. **AU** Cutler, David; Sheiner, Louise.

Shin, Hyun Song
TI Noisy Bayes Updating and the Value of Information. **AU** Morris, Stephen; Shin, Hyun Song.

TI Depth of Knowledge and the Effect of Higher Order Uncertainty. **AU** Morris, Stephen; Postlewaite, Andrew; Shin, Hyun Song.

Shlapentokh, Dmitry V.
PD May 1993. **TI** Mark Aldanov and the French Revolution: The Case of the Writer as an Historian. **AA** Stanford University. **SR** Stanford Hoover Institute International Studies Working Paper: I-93-9; The Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 54. **PR** no charge. **JE** N43, N44, P27. **KW** Bolshevik Revolution. Russian Emigres.
AB The French Revolution fascinated Russian-emigre intellectuals who fled the country after the Bolshevik Revolution. The strong similarity between twentieth century Russia and revolutionary France was one of the reasons for their strong belief that the Russian Thermidor (i.e. the collapse of the Bolshevik regime) had already started or would be inevitable in the near future. They viewed the French Thermidor as a blueprint for Russia's post-revolutionary development. This strong obsession with the French Revolution explains why many emigres continued to appeal to examples from the history of the French Revolution after the Russian Revolution had not developed according to expectations. Mark Aldanov's view on the Thermidor will serve as an example. It illustrates both the Russian intellectuals' fascination with the Thermidor as a model for Russia's political development as

well as the evolution of the emigre view on the subject.

Shome, Parthasarathi
TI A Primer on Tax Evasion. **AU** Tanzi, Vito; Shome, Parthasarathi.

Shubik, Martin
PD June 1993. **TI** The Money Rate of Interest and the Influence of Assets in a Multistage Economy with Gold or Paper Money. Part I. **AU** Shubik, Martin; Yao, Shuntian. **AA** Shubik: Yale University. Yao: University of Wellington. **SR** Yale Cowles Foundation Discussion Paper: 1046; Yale University, Cowles Foundation for Research in Economics, 30 Hillhouse Ave., Box 2125 Yale Station, New Haven, CT 06520. **PG** 41. **PR** no charge. **JE** E42, E43, E44, D51, D91. **KW** Trustless Trade. Utility Functions. Overlapping Generations.
AB The role of long lived assets is considered in serving as hostages to extend the domain of trustless trade in an exchange economy. Assuming that individuals have life cycle preferences, we consider the most general set of utility functions consistent with these preferences and a stationary equilibrium for an OLG economy. The influence of the type of asset, durable or storable on the need for money is considered.

Shy, Oz
TI Local Services and International Market Integration. **AU** Horn, Henrik; Shy, Oz.

Siebert, Jerome B.
PD February 1993. **TI** Farmers' Knowledge About Cooperatives. **AA** University of California, Berkeley. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 642; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 29. **PR** $15.50. **JE** J54, Q13. **KW** Marketing. Agricultural Cooperatives.
AB This report investigates and analyzes producers' knowledge perceptions, and expectations with respect to cooperatives. The analysis found that producers join cooperatives with the expectation that they will provide more stable and enhanced returns. Cooperatives are in a unique position within many agricultural industries to provide leadership and educational and informational activities. In doing so, they need to be cognizant of producers' knowledge, perceptions, and expectations. This report, which was undertaken with the cooperation of twelve cooperatives and is based on a survey of members and nonmembers, presents information and recommendations that cooperatives should consider in developing their leadership and educational strategies and plans.

PD May 1993. **TI** Marketing California Walnuts. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics Working Paper: 676; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 13. **PR** $4.50. **JE** Q13. **KW** Agricultural Marketing. International Marketing.
AB California walnut production has increased significantly over the past 30 years. As production expands, increased

emphasis is placed on marketing programs in order to increase sales and realize profits to all of those who produce and handle walnuts. The demand for walnuts is influenced by a number of economic factors or variables. Among these factors are walnut prices, consumer income levels, prices of competing products, and quality. These factors are coupled with industry-financed promotion programs and aggressive marketing by walnut handlers. Exports currently account for nearly 35 percent of production and have increasingly exposed the industry to international competitive influences. Hence, the markets for California walnuts are also subject to availability and prices of foreign-produced nuts as well as other countries' policies that both restrict imports of walnuts, and subsidize production and marketing. Therefore, the marketing of California walnuts has become more complex, requiring an understanding not only of domestic markets, but also of foreign markets.

PD May 1993. TI Marketing California Cotton: An Economic and Policy Overview. AU Siebert, Jerome B.; Klonsky, Karen; Pradhan, Vijay. AA Siebert and Pradhan: University of California, Berkeley. Klonsky: University of California, Davis. SR University of California at Berkeley Department of Agricultural and Resource Economics Working Paper: 677; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. PG 15. PR $8.50. JE Q13, Q12, Q18. KW Agricultural Marketing. Agricultural Policy.
AB Cotton is an important crop to California agriculture. Its 1989 production value of $1.03 billion made it California's leading crop; it is also the state's leading export crop. The profitability and viability of the California cotton industry is largely dependent on factors outside its direct control and influence. These factors include world market conditions, general economic conditions, conditions of trade, and government policies and programs, both U.S. and foreign. In addition, the amount of cotton acreage in California depends on its profitability in relation to the profitability of other field crops in the short run and fruit and vegetable crops in the long run. All of these factors taken together will determine both the short run and long run profitability of cotton production in California. This chapter will examine some of the marketing, economic, and policy considerations for California cotton production.

Simpson, Bob
PD March 1993. TI The Right to Strike and the Law in Britain, with Special Reference to Workers in Essential Services. AA London School of Economics. SR London School of Economics Centre for Economic Performance Discussion Paper: 128; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. PG 34. PR no charge. JE J52, J58. KW Unions. Labor Law.
AB The introduction of special constraints on the freedom of essential service workers and their unions to take and organize industrial action has been on the Conservative government's agenda for labor law reform for over a decade. So far, no proposals for legislation specifically directed to this issue have been forthcoming. Some of the general changes in the law of industrial conflict from 1980-1990 have, however, had a particular significance for some workgroups who most probably fall within the essential services area. Of equal if not greater significance have been fundamental, radical changes in the organization of and practices within these services, some of

which have been transferred out of the public sector. This paper outlines first the general law of industrial conflict and then the industrial relations framework in the areas which are generally agreed to be essential services and also those areas which arguably fall under this heading. The implications of the law for these groups of workers are then considered in the light of recent experience.

Smeers, Yves
TI A Stochastic Version of a Stackelberg-Nash-Cournot Equilibrium Model. AU De Wolf, Daniel; Smeers, Yves.

TI Optimal Dimensioning of Pipe Networks with Application to Gas Transmission Networks. AU De Wolf, Daniel; Smeers, Yves.

Sobel, Joel
TI Deviations, Dynamics and Equilibrium Refinements. AU Rabin, Matthew; Sobel, Joel.

Sola, Martin
TI A Reconciliation of Some Paradoxical Empirical Results on the Expectations Model of the Term Structure. AU Driffill, John; Psaradakis, Zacharias; Sola, Martin.

Sorensen, Jan Rose
TI Unemployment and Fiscal Policy in an Economic and Monetary Union. AU Andersen, Torben M.; Sorensen, Jan Rose.

Spletzer, James R.
PD October 1992. TI Reexamining the Added Worker Effect. AA Bureau of Labor Statistics. SR Bureau of Labor Statistics Working Paper: 237; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, DC 20212. PG 23. PR no charge. JE D12, J22, J64. KW Labor Force. Unemployment.
AB The added worker effect refers to a married female entering the labor force when her husband becomes unemployed. This paper is motivated not only by conflicting empirical work regarding whether or not the added worker effect exists, but also by the argument that the added worker effect should be analyzed using panel data with a short recall period. In monthly longitudinal CPS microdata, 28% of married females who are not in the labor force enter the labor force within three months of their husbands becoming unemployed. This is significantly different than the 20% labor force entrance rate over a three month period by all not in the labor force married females in the population.

Srinivasan, T. N.
PD September 1992. TI Theories of Long-Run Growth: Old and New. AU Srinivasan, T. N.; Raut, Lakshmi K. AA Yale University. SR Yale Economic Growth Center Discussion Paper: 676; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven, CT 06520. PG 38. PR $2.00. JE O41. KW Neoclassical Growth Models. Endogenous Growth.
AB Some of the recent contributions to the theory of long-run growth misleadingly characterize neoclassical growth models of the 1960's as implying that a steady growth path always exists at a rate equal to the exogenously specified growth rate of labor force in efficiency units. We argue that the

perceived problems of neoclassical growth theory are not inherent features of all the growth models of the era but only of those which assumed the marginal product of capital diminishes to zero as the input of capital is increased indefinitely relative to other inputs. We present a model that takes a different approach to endogenizing technical progress and growth by assuming fertility and savings to be endogenous and that the size of the total population has an external effect either through the negative influence of congestion or a positive stimulation of faster innovation. Our model generates a rich set of growth paths of per capita income and consumption.

Staar, Richard F.
PD May 1993. **TI** Transition to Democracy in Poland. **AA** Stanford University. **SR** Stanford Hoover Institute International Studies Working Paper: I-93-10; The Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 17. **PR** no charge. **JE** P26, P27, P52. **KW** Political Reform. Democracy.
AB Only one nation in East-Central Europe repeatedly expressed itself through national upheavals against Soviet-imposed communist rule. The Poles must have received some historic inspiration from the two nineteenth-century insurrections within the tsarist-Russian occupation zone of their partitioned country. Poland is also unique within the region in that it remained subject to martial law between 13 December 1981 and 21 July 1983 under Wojciech Jaruzelski who chaired a military junta. Yet the Polish people also managed to pioneer revolutionary change throughout the former Soviet bloc, without excessive bloodshed.

Staehr, Michael H.
TI The Arbitrage Pricing Theory and Learning. **AU** Jorgensen, Bjorn Nybo; Staehr, Michael H.

Staiger, Robert W.
TI Multilateral Tariff Cooperation During the Formation of Regional Free Trade Areas. **AU** Bagwell, Kyle; Staiger, Robert W.

Starr-McCluer, Martha
PD February 1993. **TI** Are Shocks to Labor Demand Transitory or Persistent? Evidence from Labor Flows and Wages. **AA** Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-3; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 26. **PR** no charge. **JE** E24, J23, J31. **KW** Labor Demand. Unemployment.
AB Traditional theory explains cyclical unemployment as a transitory shock to ggregate demand, while recent views stress permanent shocks necessitating abor reallocation. Using a standard labor flow model, this paper emonstrates that movements in wages after recession indicate the persistence f shocks to labor demand. If shocks are permanent, workers laid off in ecession would face lower re-employment pay even if re-employed after ecession ends. But with transitory shocks, workers re-employed in goods ould face higher wages if re-employed once recovery is underway. This mplication is examined using a competing-risk hazard model and data from he 1980's.

Steel, Mark
TI Estimating End-Use Demand: A Bayesian Approach. **AU** Bauwens, Luc; Fiebig, Denzil; Steel, Mark.

Steigerwald, Douglas G.
PD November 1992. **TI** Policy Expectations: Taxes and Investment in the U.S. **AU** Steigerwald, Douglas G.; Stuart, Charles. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 17-92; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 22. **PR** no charge. **JE** E22, D84, E62, C52. **KW** Taxation. Rational Expectations.
AB We study postwar U.S. investment and estimate the amount of foresight firms have about tax policy. We partition a firm's information at date t into knowledge of policy up to date t+d. We classify information sets by the length of time from the current date until martingale expectations begin (d). By comparing how models with different values of d predict investment around tax reforms, we identify best information sets. We find that investment reflects knowledge of current and enacted, pending policies but little other foresight.

PD June 1993. **TI** Efficient Estimation of Models with Conditional Heteroscedasticity. **AA** University of California, Santa Barbara. **SR** University of California at Santa Barbara Department of Economics Working Paper: 5-93; Working Papers Coordinator, Department of Economics, University of California at Santa Barbara, CA 93106. **PG** 24. **PR** no charge. **JE** C13, C14, C15. **KW** Semiparametric Estimation. ARCH. Conditional Heteroskedasticity.
AB Standard specifications of conditional heteroskedasticity (CH) assume that the underlying conditional distribution is normal and use quasi-maximum likelihood estimators. Normality fits poorly in many applications to financial markets. This paper relaxes the normality assumption and derives asymptotic efficiency bounds for semiparametric estimators for a broad class of CH specifications. The class includes autoregressive conditional heteroskedasticity (ARCH), generalized ARCH (GARCH), exponential ARCH, and asymmetric power ARCH. Sufficient conditions for consistency and asymptotic normality of semiparametric estimators are derived. It is shown that semiparametric estimators achieve the efficiency bound. Monte Carlo simulations demonstrate that for small samples, semiparametric estimators sometimes substantially outperform the quasi-maximum likelihood estimator.

Stein, Jeremy C.
TI Monetary Policy and Bank Lending. **AU** Kashyap, Anil K.; Stein, Jeremy C.

Stein, Jerome L.
PD June 1993. **TI** Can the Central Bank Achieve Price Stability? **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 93-33; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 21. **PR** no charge. **JE** E52, E58, E24, E31. **KW** Inflation. Monetary Policy.
AB The reason why the growth of M2 per se is not directly related to the rate of inflation is that the rate of inflation is affected by both the unemployment rate and gap between the aggregate demand for goods and current real GDP. The

monetary input affects this gap indirectly. The growth of M2 is a very good indicator of the rate of inflation, as well as the unemployment rate, only within the context of a dynamic model where the unemployment and inflation rates interact and the driving force is the rate of growth of M2. The model is structurally stable, invariant to policy changes from 1956-92 and the explanatory power of this system is high. The growth of M2 is not controllable: it is an endogenous variable. Hence the growth of M2 is not an intermediate target. We show that the growth of adjusted bank reserves is a good intermediate target. Within the context of the dynamic model where unemployment and inflation interact, and the exogenous input is the growth of adjusted bank reserves, the course of inflation and unemployment can be explained and predicted quite well.

Steingrimsson, Einar
TI   The Volume of the Relaxed Boolean Quadric Polytope.
AU   Ko, Chun-Wa; Lee, Jon; Steingrimsson, Einar.

Steinmeier, Thomas L.
TI   Employer Provided Health Insurance and Retirement Behavior. AU   Gustman, Alan L.; Steinmeier, Thomas L.

Stevens, Guy V. G.
PD   April 1993. TI   Exchange Rates and Foreign Direct Investment: A Note. AA   Board of Governors of the Federal Reserve System. SR   Board of Governors of the Federal Reserve System International Finance Discussion Paper: 444; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. PG   5. PR   no charge. JE   F31, F23, C52. KW   Imperfect Capital Markets. Multinational Firms.
AB   In "Exchange Rates and Direct Investment: An Imperfect Capital Markets Approach," Kenneth Froot and Jeremy Stein (1991) develop a new finance-based theory to answer an old question - the relationship, if any, between the flow of foreign direct investment and the exchange rate. Their theory, based on the possibility that a foreign firm's borrowing opportunities for financing a U.S. acquisition may be a function of its net worth in dollars, implies a negative relationship between a dollar appreciation and direct investment inflows into the United States. The major purpose of this note is to show that this empirical support for the theory is weak. The authors' regressions show evidence of serious instability, and the significant negative relationship between direct investment inflows and the value of the dollar disappears for important subperiods of the 1973-88 period and for the sample period extended through 1991.

Stillson, Richard T.
TI   Money and Banking Statistics in Former Soviet Union (FSU) Economies. AU   Di Calogero, Robert; Nahr, K. Wilhelm; Stillson, Richard T.

Stock, James H.
TI   The Use of Monetary Aggregate to Target Nominal GDP.
AU   Feldstein, Martin; Stock, James H.

Stuart, Charles
TI   Policy Expectations: Taxes and Investment in the U.S.
AU   Steigerwald, Douglas G.; Stuart, Charles.

Subramanian, Shankar
TI   A Regional, Environmental, Computable General Equilibrium Model of the Los Angeles Basin. AU   Robinson, Sherman; Subramanian, Shankar; Geoghegan, Jacqueline.

Swamy, P. A. V. B.
PD   April 1993. TI   Random Coefficient Models: Theory and Applications. AU   Swamy, P. A. V. B.; Tavlas, George S. AA   Swamy: Federal Reserve Board. Tavlas: International Monetary Fund. SR   Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-14; C/O Stephen A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. PG   39. PR   no charge. JE   C51, C52, C53. KW   Random Coefficient Models. Model Validation.
AB   This paper provides an overview of the rationale behind, and the implementation, and uses of, the random coefficient approach to econometric modeling. A simple random coefficient model is presented, and methods for estimating, testing, and validating such a model are described. A more general model is then presented. The general model is shown to include several fixed-coefficient models as special cases and can be estimated incorporating a variety of judgements concerning simplification. Finally, the paper reviews recent applications of random coefficient estimation.

Swinkels, Jeroen M.
TI   Normal Form Structures in Extensive Form Games.
AU   Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen M.

TI   Order Independence for Iterated Weak Dominance.
AU   McFarland-Marx, Leslie; Swinkels, Jeroen M.

TI   Normal Form Structures in Extensive Form Games.
AU   Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen M.

TI   Structural Indifference in Normal Form Games.
AU   Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen M.

TI   Structural Indifference in Normal Form Games.
AU   Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen M.

Symansky, Steven
TI   Evaluating the EMS and EMU Using Stochastic Simulations: Some Issues. AU   Masson, Paul R.; Symansky, Steven.

Symons, James
TI   Five Weeks in the Life of the Pound: Interest Rates, Expectations and Sterling's Exit from the ERM. AU   Robertson, Donald; Symons, James.

Tan, Guofu
TI   Optimal Selling Strategies for Oil and Gas Leases with an Informed Buyer. AU   Hendricks, Kenneth; Porter, Robert H.; Tan, Guofu.

Tanzi, Vito
PD   March 1993. TI   A Primer on Tax Evasion. AU   Tanzi, Vito; Shome, Parthasarathi. AA   International

Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/21; International Monetary Fund, Washington, DC 20431. **PG** 13. **PR** not available. **JE** H26. **KW** Taxation. Tax Withholding.

AB Tax evasion is universal. It depends on the economic and tax structures, types of income, and social attitudes. The theory of tax evasion has limitations since it depends solely on the attitude toward risk with full information regarding the tax administration's behavior. Methodologies for estimating tax evasion include predominantly estimating the underground economy, and comparing taxes declared with potential tax revenue calculated from national accounts. Actions in addressing tax evasion include use of withholding, presumptive and minimum taxes, selective auditing, penalties, and cross checks between taxes.

PD March 1993. **TI** Fiscal Policy and the Economic Restructuring of Economies in Transition. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/22; International Monetary Fund, Washington, DC 20431. **PG** 30. **PR** not available. **JE** P21, E62, H62, H50. **KW** Economic Transition. Budget Deficits. Taxation.

AB This paper discusses major fiscal issues faced by the previously centrally planned economies in their transition to market economies. It focuses on three main topics: (a) the extent to which the budget deficit should be a guide to policy; (b) the reforms that must be carried out in tax legislation and tax administration; and (c) the required changes in public expenditure and in the setting up of institutions to manage public spending.

Tareq, Shamsuddin
TI Economic Reform in Arab Countries: A Review of Structural Issues for the Remainder of the 1990s. **AU** El-Erian, Mohamed A.; Tareq, Shamsuddin.

Tavlas, George S.
TI Random Coefficient Models: Theory and Applications. **AU** Swamy, P. A. V. B.; Tavlas, George S.

Tersman, Gunnar
PD December 1992. **TI** The Volatility of Consumption in a Simple General Equilibrium Model. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: 92/109; International Monetary Fund, Washington, DC 20431. **PG** 12. **PR** not available. **JE** D91, D58, E21, F41. **KW** Consumption Growth.

AB This paper studies the volatility of consumption relative to output in the context of a simple general equilibrium model of a small open economy subject to exogenous shocks in productivity. With infinite horizons and exogenous relative prices, the model generates variance estimates that are well above what can be observed in empirical data. While finite horizon and endogenous terms of trade reduce the volatility of consumption, the model fails to generate sufficient serial correlation with respect to the consumption growth rate. If the household's decision problem is modified to take into account durability and adjustment costs, the model does well on both dimensions.

Tesar, Linda L.
PD September 1992. **TI** Home Bias and the Globalization of Securities Markets. **AU** Tesar, Linda L.; Werner, Ingrid M. **AA** Tesar: University of California, Santa Barbara. Werner: Stanford University, Institute for International Economic Studies and National Bureau of Economic Research. **SR** University of California at Santa Barbara Department of Economics Working Paper: 16-92; Department of Economics, University of California at Santa Barbara, Santa Barbara, CA 93106. **PG** 19. **PR** no charge. **JE** G15, G11, F32. **KW** Portfolio Choice. International Investment.

AB This paper documents the available evidence on international portfolio investment in five OECD countries. We draw three conclusions from the data. First, there is strong evidence of a home bias in national investment portfolios despite the potential gains from international diversification. Second, to the extent investors hold international securities, the composition of the portfolio of foreign securities seems to reflect factors other than diversification of risk. Third, the high volume of cross-border capital flows and the high turnover rate on foreign equity investments relative to domestic equity markets suggests that transactions costs and incomplete information are unlikely to be important deterrents to international investment. These observations suggest that a richer set of models is required to account for international investment behavior.

Thierfelder, Karen E.
TI Wage Changes in a U.S.-Mexico Free Trade Area: Migration Versus Stolper-Samuelson Effects. **AU** Burfisher, Mary E.; Robinson, Sherman; Thierfelder, Karen E.

Thompson, T. Scott
TI Maximum Likelihood Estimation of a Binary Choice Model with Random Coefficients of Unknown Distribution. **AU** Ichimura, Hidehiko; Thompson, T. Scott.

Torous, Walter N.
TI A Comparison of Financial Recontracting in Workouts and Chapter 11 Reorganizations. **AU** Franks, Julian R.; Torous, Walter N.

Trejo, Stephen J.
TI The Decline in Immigrant Labor Market Skills: Did It Continue in the 1980's? **AU** Funkhouser, Edward; Trejo, Stephen J.

Trejos, Alberto
PD February 1993. **TI** Search, Bargaining, Money and Prices. **AU** Trejos, Alberto; Wright, Randall. **AA** Trejos: University of Pennsylvania. Wright: University of Pennsylvania and Federal Reserve Bank of Minneapolis. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-13; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 29. **PR** no charge. **JE** D83, C78. **KW** Search Theory. Monetary Equilibrium.

AB The goal of this paper is to extend existing search-theoretic models of fiat money, which until now have assumed that the price level is exogenous, by explicitly incorporating bilateral bargaining theory. This allows us to determine prices, and leads to additional insights concerning the role of money. We find monetary equilibria differ from what one would expect in a Walrasian world with the same preferences and technology,

although the difference becomes small as the discount rate or search friction vanishes. In addition to steady states, there exist nonstationary equilibria where the price level increases without bound.

PD April 1993. **TI** Monetary Exchange under Private Information: A Note. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and Social Science (CARESS) Working Paper: 93-16; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 11. **PR** no charge. **JE** D82, D83, D51, E40. **KW** Money. Search. Bilateral Exchange.
AB This note has presented a simplified version of the model of Williamson and Wright (1993) concerning bilateral exchange in the presence of private information. The simplifying assumption of ruling out barter made the model more tractable. This made it possible to completely characterize the set of equilibria, and to better study how the role of fiat money is changed by qualitative uncertainty. Perhaps the most interesting results deal with welfare. It was found that the optimal money supply may be lower than the value that other search models of money suggest (the value that maximizes the frequency of consumption). There is a trade-off between providing liquidity to facilitate exchange and providing incentives to produce output of high quality.

Tsybakov, A.
TI Non Linear ARX-Models: Probabilistic Properties and Consistent Recursive Estimation. **AU** Doukhan, P.; Tsybakov, A.

Tulkens, Henry
PD May 1993. **TI** Non-Parametric Efficiency, Progress and Regress Measures for Panel Data: Methodological Aspects. **AU** Tulkens, Henry; vanden Eeckaut, Philippe. **AA** Tulkens: Universite Catholique de Louvain and Facultes Universitaires Saint-Louis. Eeckaut: Universite Catholique de Louvain. **SR** Universite Catholique de Louvain CORE Discussion Paper: 9316; Universite Catholique de Louvain, Voie du Roman Pays, 34, B-1348 Louvain-la-Neuve, BELGIUM. **PG** 37. **PR** not available. **JE** D24. **KW** Production Sets. Production Efficiency.
AB This purely methodological paper deals with the role of time in non-parametric efficiency analysis. Using both FDH and DEA technologies, it first shows how each observation in a panel can be characterized in efficiency terms vis-a-vis three different kinds of frontiers: (i) "contemporaneous", (ii) "sequential", and (iii) "intertemporal". These are then compared with window analysis. Next, frontier shifts "outward" and "inward", interpreted as progress or regress are considered for the two kinds of technologies, and computational methods are described in detail for evaluating such shifts in either case. These are also contrasted with what is measured by the "Malmquist" productivity index. Finally, an alternative way of identifying progress and regress, independent of the frontier notion and referring instead to some "benchmark" notion, is extended here to panel data.

Udell, Gregory F.
TI Lines of Credit, Collateral, and Relationship Lending in Small Firm Finance. **AU** Berger, Allen N.; Udell, Gregory F.

Unni, Jeemol
PD December 1992. **TI** Occupational Choice and Multiple Job Holding in Rural Gujarat, India. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 677; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven CT 06520. **PG** 40. **PR** $2.00. **JE** J24, C25. **KW** Self Employment. Land Value.
AB This paper analyzes occupational choice behavior of individuals in rural Gujarat in Western India. It examines the economic rationale for holding single or multiple jobs and undertaking self wage employment. The analysis suggests that persons who undertake multiple jobs are younger, less educated, are faced with lower wage rates and live further away from towns. The influence of the value of physical capital on job choices is complex. The polychotomous logit model suggests that higher value of land and other assets encourage diversification into a second activity, except at a very high value of land, among the self-employed. Further disaggregation, however, reveals that while this is true for self-employed men with land, landless self-employed men prefer to specialize in a single activity. Moreover, self-employed workers with land also tend to undertake two activities in different sectors. This can be interpreted as risk-averse diversification.

Urbano, Amparo
TI Duopoly Signal Jamming. **AU** Mirman, Leonard J.; Samuelson, Larry; Urbano, Amparo.

Usher, Dan
PD May 1993. **TI** Education as a Deterrent to Crime. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 870; Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 36. **PR** $3.00 + GST Canada; $3.50 U.S. and foreign. **JE** I21, K42, D62. **KW** Civic Externality. Public Education.
AB Most people believe that education - especially elementary education - conveys a civic externality. Students are taught, not only to be productive, but to be honest, upright, law abiding and loyal to their country. Education conveys benefits to society as a whole, over and above the benefit to the student in enhancing his future earning power. The civic externality is incorporated into an "anarchy" model. People can choose to be farmers or bandits, utilities in these occupations must be equal in equilibrium and education reduces the incidence of banditry by inculcating a distaste for a life of crime. The model serves to clarify the civic externality by removing many other features of the market for education. It shows how the civic externality can place a wedge between private and social returns to education, causing the usual estimates of the return to education to be much too low. It also shows that the presence or absence of a civic externality may depend on how education is provided, in particular, that universality may be critical.

Van Wassenhove, Luk
PD February 1993. **TI** Trade-Offs? What Trade-Offs? (Competence and Competitiveness in Manufacturing Strategy). **AU** Van Wassenhove, Luk; Corbett, Charles. **AA** INSEAD. **SR** INSEAD Working Papers: 93/09/SM/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 15. **PR** not available. **JE** M11, L21,

L23. **KW** Management. Competitive Advantage.
AB Manufacturing strategy is increasingly recognized by academics as essential in achieving sustainable competitive advantage. The reason it has not yet penetrated equally far into the world of business is partly the lack of simple conceptual foundations. As a result, a number of important observations showing up recently in manufacturing strategy literature have not yet captured the attention they deserve, despite their broad implications for managers. This article attempts to clarify some of these issues. It is important to distinguish clearly between internal competences and external measures of competitiveness; ensuring a proper link between the two is a critical factor for success. The points we emphasize are (1) competences don't have to hurt each other, (2) performance relative to the competition is what counts, (3) each product has to meet some minimum requirements to have a chance of selling, and (4) these requirements are continually becoming tougher.

vanden Eeckaut, Philippe
TI Non-Parametric Efficiency, Progress and Regress Measures for Panel Data: Methodological Aspects.
AU Tulkens, Henry; vanden Eeckaut, Philippe.

Vasil'ev, Valery
PD September 1991. **TI** The Equivalence of Core and Lindahl Equilibria in an Economy with Semi-Public Goods.
AU Vasil'ev, Valery; Weber, Shlomo; Wiesmeth, Hans.
AA Vasil'ev: Academy of Science, Novosibirsk. Weber: York University. Wiesmeth: University of Bonn. **SR** Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: B-200; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. **PG** 23. **PR** no charge. **JE** H41, D51. **KW** Public Goods. Production Economy.
AB This paper examines a model of an infinite production economy with a finite number of types of agents and semi-public goods, where utility of a member of a coalition depends not only on the vector of public commodities produced by this coalition, but also on the structure of the coalition. The public goods are thus subjected to crowding and exclusion is possible. The main purpose of the paper is then to derive necessary and sufficient conditions on the degrees of congestion which guarantee the equivalence between the core and the set of equal treatment Lindahl equilibria. It is shown that the equivalence holds for economies satisfying standard assumptions if and only if there are constant returns to group size for each type of agents. The paper thus generalizes and completes other approaches to core equivalence in a public goods context.

Vegh, Carlos A.
TI Stabilization Dynamics and Backward-Looking Contracts. **AU** Calvo, Guillermo A.; Vegh, Carlos A.

Venables, Anthony J.
PD April 1993. **TI** Equilibrium Locations of Vertically Linked Industries. **AA** London School of Economics and Centre for Economic Policy Research. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 137; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 21. **PR** no charge. **JE** F12, R32. **KW** Agglomeration. Imperfect Competition. International Trade.
AB This paper considers the locational choice of firms in an upstream and a downstream industry. Both industries are imperfectly competitive, with firms subject to increasing returns. There are transport costs between the two locations. Depending on the level of these costs there may be a single equilibrium with production diversified between locations, or multiple equilibria, some of which involve agglomeration at a single location. Typically the forces for agglomeration are greatest at intermediate levels of transport costs. Reducing these costs from a high to an intermediate level will cause agglomeration and consequent divergence of economic structure and income levels; reducing them to a low level may cause the industries to operate in both locations, bringing convergence of structure and income.

Ventura, Luigi
TI A Note on Redistributions and Gains from Trade.
AU Cordella, Tito; Ventura, Luigi.

Vial, Jean-Philippe
TI A Parallel Block Cholesky Factorization for Staircase Linear Programming Problems. **AU** Loute, Etienne; Vial, Jean-Philippe.

Villanueva, Delano
TI Testing the Neoclassical Theory of Economic Growth: A Panel Data Approach. **AU** Knight, Malcolm; Loayza, Norman; Villanueva, Delano.

Viscusi, W. Kip
PD May 1993. **TI** The Probability Compression Effect: Estimation of Revealed Probabilities and Utility Functions for Uncertain Decisions. **AU** Viscusi, W. Kip; Evans, William N. **AA** Viscusi: Duke University. Evans: University of Maryland. **SR** University of Maryland Department of Economics Working Paper: 93-3; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 22. **PR** no charge. **JE** D12, D81. **KW** Uncertainty. Risk Perceptions. Bayesian Learning.
AB Using two sets of data on consumer product decisions and risky job choices, this paper introduces an approach to jointly estimate individual utility functions and risk perceptions implied by their decisions. When compared with either reported risk perceptions or risk levels stated in the survey, there is a "probability compression effect" for revealed perceptions. There is a floor on revealed behavioral probabilities above zero, as well as a ceiling below 1.0. Revealed probabilities are not fully consistent with either a model of perfect information in which respondents take survey information at face value or a Bayesian learning approach, unless one recognizes a potential role for prior information external to the survey.

Wallace, L. Tim
PD June 1993. **TI** Proceedings of the Panel Discussion on Property Rights. **AU** Wallace, L. Tim; Moles, Jerry; Rodrigues, Kim. **AA** Wallace and Moles: University of California, Berkeley. Rodrigues: Cooperative Extension Humboldt/Del Norte Counties. **SR** University of California at Berkeley Department of Agricultural and Resource Economics Working Paper: 678; Department of Agricultural and Resource Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 20. **PR** $5.50.

JE   Q20, R14, K11. **KW**   Biodiversity. Property Rights.
AB   Discussion of property rights and a memorandum of understanding on biodiversity.

Walsh, Patrick P.

TI   Evidence of Efficiency Wage Payments in U.K. Firm Level Panel Data. **AU**   Konings, Jozef; Walsh, Patrick P.

Wang, Deming

TI   An Event History Analysis of Divorce in China. **AU**   Zeng, Yi; Schultz, T. Paul; Wang, Deming.

Wang, Yijiang

TI   When Privatization Should Be Delayed: The Effect of Communist Legacies on Organizational and Institutional Reforms. **AU**   Murrell, Peter; Wang, Yijiang.

Ward, Michael R.

TI   Telecommunications Bypass and the "Brandon Effect". **AU**   Parsons, Steven G.; Ward, Michael R.

Ware, Roger

TI   A Dynamic Model of Endogenous Trade Policy. **AU**   Lapham, Beverly J.; Ware, Roger.

Wassenhove, Luk

PD   not available. **TI**   The Use of Third Party Logistics Services by Large Western European Manufacturers. **AU**   Wassenhove, Luk; Lieb, Robert C.; Millen, Robert A. **AA**   Wassenhove: INSEAD. Lieb and Millen: Northeastern University, Boston. **SR**   INSEAD Working Papers: 92/76/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG**   21. **PR**   not available. **JE**   L23. **KW**   Outsourcing. Organization of Production.
AB   The march towards the EC's single market has stimulated many firms to reexamine their logistical operations. A key issue in these efforts is the utilization of third party logistics services, also referred to as outsourcing. Firms adopting this approach take activities that had been done internally and turn them over to outside providers. This research provides a data base for analyzing the experiences of companies that utilize third parties for provisions of logistics services. The areas addressed in the study were the extent to which those companies rely upon the services of third party logistics firms, the specific third party services utilized, the benefits to users, the obstacles to implementation encountered, the impact on the firms logistics costs, customer satisfaction, and employees, and the future plans regarding use of third party services.

Weber, Axel

PD   May 1993. **TI**   Time-Varying Devaluation Risk, Interest Rate Differentials, and Exchange Rates in Target Zones: Empirical Evidence from the EMS. **AA**   University of Aarhus. **SR**   Aarhus Institute of Economics Memo: 1993-11; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG**   32. **PR**   no charge. **JE**   F31, F41, E43, F33. **KW**   European Monetary System.
AB   Stylized empirical facts about the behavior of exchange rates and interest rate differentials in real world target zone arrangements such as the European Monetary System (EMS) are at odds with the predictions of the simple models of a fully credible target zone. Incorporating time-varying devaluation risk explains the EMS data quite well. The present paper finds that estimates of expected devaluation rates have recently declined significantly, but devaluation risks are not yet completely eliminated. Second, due to devaluation expectations many of the relationships postulated by standard target zone models are contaminated with noise, but adjusting for expected devaluation rates frequently reveals almost noise-free relationships. These suggest that with the exception of the DM-Guilder peg most DM target zones within the EMS lagged both long-term and short-term credibility.

Weber, Shlomo

TI   Strongly Balanced Cooperative Games. **AU**   Le Breton, Michel; Owen, Guillermo; Weber, Shlomo.

TI   The Equivalence of Core and Lindahl Equilibria in an Economy with Semi-Public Goods. **AU**   Vasil'ev, Valery; Weber, Shlomo; Wiesmeth, Hans.

Wei, Shang-Jin

TI   Trade Blocs and Currency Blocs. **AU**   Frankel, Jeffrey A.; Wei, Shang-Jin.

Weil, David N.

TI   Historical Perspectives on the Monetary Transmission Mechanism. **AU**   Miron, Jeffrey A.; Romer, Christina D.; Weil, David N.

Weinbach, Gretchen C.

TI   Regime Switching with Time-Varying Transition Probabilities. **AU**   Diebold, Francis X.; Lee, Joon-Haeng; Weinbach, Gretchen C.

Weiner, Stuart E.

PD   March 1993. **TI**   Determinants of the Decline in Union COLA's. **AA**   Federal Reserve Bank of Kansas City. **SR**   Federal Reserve Bank of Kansas City Research Working Paper: 93-02; Research Division, Federal Reserve Bank of Kansas City, 925 Grand Ave., Kansas City, MO 64198. **PG**   13. **PR**   no charge. **JE**   J51, J31. **KW**   Union Contracts. Inflation.
AB   The paper examines COLA coverage among U.S. union workers at the industry level from 1974 to 1992. A fixed effects Tobit model is estimated using pooled cross-section time-series data for 15 manufacturing industries. The impacts of industry characteristics and economywide shocks are examined. Results indicate that inflation variability, union membership density, and unobserved industry characteristics are important determinants of COLA coverage. In tandem with the observed declines in inflation variability and unionization, these results help account for the striking decline in COLA coverage in recent years.

Werner, Ingrid M.

TI   Home Bias and the Globalization of Securities Markets. **AU**   Tesar, Linda L.; Werner, Ingrid M.

West, Ken D.

PD   February 1993. **TI**   A Utility Based Comparison of Some Models of Exchange Rate Volatility. **AU**   West, Ken D.; Edison, Hali; Cho, Dongchul. **AA**   West: University of Wisconsin. Edison: Board of Governors of the Federal Reserve

System. Cho: Texas A&M University. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 441; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 22. **PR** no charge. **JE** F31. **KW** Exchange Rates. GARCH Model.
AB When estimates of variances are used to make asset allocation decisions, underestimates of population variances lead to lower expected utility than equivalent overestimates: a utility based criterion is asymmetric, unlike standard criteria such as mean squared error. To illustrate how to estimate a utility based criterion, we use five bilateral weekly dollar exchange rates, 1973-1989, and the corresponding pair of Eurodeposit rates. Of homoskedastic, GARCH, autoregressive and nonparametric models for the conditional variance of each exchange rate, GARCH models tend to produce the highest utility, on average. A mean squared error criterion also favors GARCH, but not as sharply.

Wickham, Peter
PD March 1993. **TI** A Cautionary Note on the Use of Exchange Rate Indicators. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/93/5; International Monetary Fund, Washington, DC 20431. **PG** 19. **PR** not available. **JE** F31. **KW** Exchange Rate Indicators.
AB The paper reviews the basis for the use of various popular exchange rate indicators by tracing their conceptual development, the links between these indicators, and how they are measured in actual practice. It also considers the difficulties often encountered in attempting to obtain empirical counterparts to the various concepts and the limitations on the use of indicators likely to arise therefrom. The paper illustrates the behavior of various exchange rate indicators using data for Colombia and Kenya.

Widmaier, Hans Peter
TI Aspects of Euro-American Cooperation. **AU** Gann, L. H.; Widmaier, Hans Peter; Elbe, Frank.

Wierenga, Berend
TI An Integrated Perspective on Designing Management Support Systems. **AU** Dutta, Soumitra; Wierenga, Berend; Dalebout, Arco.

Wiesmeth, Hans
TI The Equivalence of Core and Lindahl Equilibria in an Economy with Semi-Public Goods. **AU** Vasil'ev, Valery; Weber, Shlomo; Wiesmeth, Hans.

Wilson, Berry
TI Contagious Bank Runs: Evidence From the 1929-1933 Period. **AU** Saunders, Anthony; Wilson, Berry.

Wolf, Holger, C.
PD April 1993. **TI** Anti-Tax Revolutions and Symbolic Prosecutions. **AA** New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4337; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 7. **PR** $5.00. **JE** H26, K34, K42. **KW** Tax Evasion. Monitoring.
AB We extend the traditional tax evasion model to take account of the interaction between individual compliance decisions and perceived detection probabilities. The generalization provides a rationale for "anti-tax revolutions" characterized by a sudden shift of a significant fraction of the tax paying citizenry from compliance to tax evasion with unchanged fundamentals and monitoring rules. We establish, with an application to hyperinflation, the possibility of multiple compliance equilibria with lock-in effects. Finally, we demonstrate the potential cost effectiveness of "symbolic prosecution" as an equilibrium shifting device in preference to permanent changes the monitoring process.

Wolinsky, Asher
TI Learning About Variable Demand in the Long Run. **AU** Rustichini, Aldo; Wolinsky, Asher.

Wolsey, Laurence A.
TI A New Approach to Minimizing the Frontwidth in Finite Element Calculations. **AU** De Souza, C. C.; Keunings, R.; Wolsey, Laurence A.; Zone, O.

TI Polyhedra for Lot-Sizing with Wagner-Whitin Costs. **AU** Pochet, Yves; Wolsey, Laurence A.

Woo, Wing Thye
PD May 1993. **TI** The Art of Reforming Centrally-Planned Economies: Comparing China, Poland, and Russia. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-9; Department of Economics, University of California at Davis, CA 95616-8578. **PG** 32. **PR** $3.00 U.S. and Canada. $4.00 International. **JE** P27, P30, P52. **KW** Economic Transition. Big Bang. Gradual Reform.
AB We use the experiences of China, Poland and Russia to assess the debate between gradualism and big bang in the reform of centrally-planned economies. The three reasons usually given in support of gradualism are (1) agricultural reform should precede industrial reforms, (2) state-owned enterprises (SOE's) can be reformed and privatization is not necessary, and (3) economic liberalization should precede political liberalization. We conclude that these three reasons are not generalizable. The major reason for the gradual strategy in China is the absence of consensus among the elite over what the final form of the economy should be i.e. how much planning and how much market. We note that performance has been most successful in the areas where Chinese reforms have been radical (agriculture, service and trade) and lackluster where reforms have been incremental (the state enterprise sector). The Chinese experience may show that incremental reform of centrally-planned economies is possible under the right initial conditions, but it does not prove the superiority of the gradual strategy.

Wright, Randall
TI Buyers and Sellers. **AU** Burdett, Kenneth; Coles, Melvyn; Kiyotaki, Nobuhiro; Wright, Randall.

TI Search, Bargaining, Money and Prices. **AU** Trejos, Alberto; Wright, Randall.

Yao, Shuntian
TI The Money Rate of Interest and the Influence of Assets in a Multistage Economy with Gold or Paper Money. Part I. **AU** Shubik, Martin; Yao, Shuntian.

Ying, John S.
TI   Hospital Costs and Excess Bed Capacity: A Statistical Analysis. AU   Keeler, Theodore E.; Ying, John S.

Yosha, Oved
PD   May 1993. TI   Risk Sharing and Competition Among Financial Intermediaries in a Large Cournot-Walras Economy. AA   Brown University. SR   Brown University Department of Economics Working Paper: 93-29; Department of Economics, Brown University, Providence, Rhode Island 02912. PG   14. PR   no charge. JE   C78, D83, G20, L10. KW   Financial Sector. Search. Bargaining.
AB   For a large and well diversified economy the optimal market structure of the financial sector involves many large groups of intermediaries. Large groups allow for considerable risk sharing within the groups. When there are many such groups the monopoly power of each group becomes negligible. Therefore, the complete market allocation is closely approximated. The result is derived in a simple Cournot-Walras model with risky technologies.

TI   Decentralized Markets with Pairwise Meetings: Recent Developments. AU   Serrano, Roberto; Yosha, Oved.

Yu, G. George
TI   A Simplified Approach to the Valuation of American Options and its Applications. AU   Kim, In Joon; Yu, G. George.

Yuen, Chi-Wa
TI   Convergence in Growth Rates: A Quantitative Assessment of the Role of Capital Mobility and International Taxation. AU   Razin, Assaf; Yuen, Chi-Wa.

Zaman, Asad
TI   Interindustry Variation in the Costs of Job Displacement. AU   Carrington, William; Zaman, Asad.

Zeldes, Stephen P.
TI   Dynamic Efficiency in the Gifts Economy. AU   O'Connell, Stephen A.; Zeldes, Stephen P.

Zeng, Yi
PD   July 1992. TI   Leaving Parental Home: Census-Based Estimates for China, Japan, South Korea, United States, France and Sweden. AU   Zeng, Yi; Coale, Ansley; Choe, Minja Kim; Liang, Zhiwu; Liu, Li. AA   Yale University. SR   Yale Economic Growth Center Discussion Paper: 673; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven, CT 06520. PG   43. PR $2.00. JE   J10, P52. KW   Families.
AB   Using the interactive, intracohort, interpolation procedure, this article tries to remedy the lack of data on home-leaving by providing an international comparison of estimated census-based, single-year, age-specific net rates of leaving home for males and females in China, Japan, South Korea, United States, Sweden, and France. Our study demonstrates the large differences in the age pattern of leaving the parental home between the East Asian and the Western countries. The male and the female median ages at home-leaving in the three East Asian countries studied were higher than those in the three Western countries studied by a margin of 2-3 years. The proportion leaving the parental home in the East Asian countries is also much lower than in the Western countries.

PD   November 1992. TI   An Event History Analysis of Divorce in China. AU   Zeng, Yi; Schultz, T. Paul; Wang, Deming. AA   Yale University. SR   Yale Economic Growth Center Discussion Paper: 675; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven, CT 06520. PG   34. PR $2.00. JE   J12, J13, O53. KW   Marriage. Families.
AB   This study demonstrates that the level of divorce in China is extremely low, in comparison with other developed and developing countries. Similar to findings from other studies, the risk of divorce for women who married before age 18 is higher than those married after age 20, controlling for several other socio-demographic factors. Arranged marriage has a risk of divorce which is about 2.5 times as high as the non-arranged ones. The divorce level in urban areas is higher than in rural areas. Education and occupation are not statistically significant determinants of divorce. Our estimates show that holding other things equal, women with more children have a lower risk of divorce. Son-preference exerts an effect on marriage dissolution. Women with no son have significantly higher risk of divorce than those with at least one son.

Zenner, Markus
PD   November 1992. TI   Performance of Least Squares Learning in Autoregressive Models with Forecast Feedback: The Stochastic Case. AA   University of Bonn. SR   Universitat Bonn Sonderforschungsbereich 303 - Discussion Paper: B-225; Sonderforschungsbereich 303 an der Universitat Bonn, Adenauerallee 24-42, D-5300 Bonn 1, DEUTSCHLAND. PG   24. PR   no charge. JE   C22, D83. KW   Limit Expectations.
AB   In a recent paper we considered in a deterministic framework a simple autoregressive model with forecast feedback together with a least squares learning procedure in order to find out under what conditions there is convergence of the learning procedure towards rational expectations. Here we consider the same model in a stochastic framework by introducing a disturbance term into the model equation.

Zervos, David
TI   Optimal Consumption Dynamics with Non-Concave Habit Forming Utility. AU   Orphanides, Athanasios; Zervos, David.

Zilcha, Itzhak
TI   Technological Progress and Income Inequality: A Model with Human Capital and Bequest. AU   Karni, Edi; Zilcha, Itzhak.

TI   Technological Progress and Income Inequality: A Model with Human Capital and Bequest. AU   Karni, Edi; Zilcha, Itzhak.

Zone, O.
TI   A New Approach to Minimizing the Frontwidth in Finite Element Calculations. AU   De Souza, C. C.; Keunings, R.; Wolsey, Laurence A.; Zone, O.