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)

Adams, Gregory D.

PD August 1993. **TI** Modelling Natural Resource Negotiations: An Application to California Water Policy. **AU** Adams, Gregory D.; Rausser, Gordon C.; Simon, Leo K. **AA** University of California, Berkeley. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 685; Department of Agricultural and Resource Economics, 313 Giannini Hall, UC Berkeley, Berkeley, CA 94720. **PG** 37. **PR** $11.25. **JE** Q20, Q25, Q21. **KW** Natural Resources. Fisheries Management. Oil Pollution.

AB Increasing urban and environmental demands for water have led to widespread calls for reform of the existing water allocation system in California. The major interest groups, agricultural water users, urban water agencies and environmental groups, are negotiating over policy reform packages in a non-cooperative, multilateral setting. In this paper we advance a new framework for noncooperative, multilateral bargaining that can be used to conceptualize the negotiation process. In the proposed game theoretic setting, the outcome of the negotiation process depends crucially on the "constitutional" structure of the game. Computer simulations investigate several key issues of the policy debate.

Agrawal, Nisha

TI Structural Adjustment, Economic Performance, and Aid Dependency in Tanzania. **AU** Nord, Roger; Mered, Michael; Agrawal, Nisha; Ahmed, Zafar.

Ahmed, Zafar

TI Structural Adjustment, Economic Performance, and Aid Dependency in Tanzania. **AU** Nord, Roger; Mered, Michael; Agrawal, Nisha; Ahmed, Zafar.

Ahn, Hyungtaik

PD June 1992. **TI** Nonparametric Two-Stage Estimation of Conditional Choice Probabilities in a Binary Choice Model Under Uncertainty. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E92-20; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** 51. **PR** no charge. **JE** C25, C14, C13. **KW** Kernel Estimation. Discrete Choice.

AB In this paper, estimation of conditional choice probabilities in a binary choice model under uncertainty is considered under weak nonparametric restrictions on expectations and the error distribution. The estimation method is two-stage nonparametric which is applicable if expectations are fulfilled and are conditioned only on variables observed by the researcher. The first stage estimates expectations nonparametrically using realizations of agents' future, and the second stage estimates conditional choice probabilities nonparametrically using choice data and the expectations estimates. Working in the context of kernel estimation, it is found that the choice probability estimate is uniformly strongly consistent and is asymptotically normal. A lower bound on the uniform convergence rate is obtained, which is shown to be slower than the minimum of the rates of convergence of the first stage and the hypothetical second stage estimates.

Aizenman, Joshua

PD May 1993. **TI** Resource Allocation During the Transition to a Market Economy: Policy Implications of Supply Bottlenecks and Adjustment Costs. **AU** Aizenman, Joshua; Isard, Peter. **AA** Aizenman: Dartmouth College and National Bureau of Economic Research. Isard: International Monetary Fund. **SR** National Bureau of Economic Research Working Paper: 4366; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** D21, D62, D23, P31, P12. **KW** Economic Transition. Credit Markets. Pooling Arrangements.

AB This paper explains why a laissez-faire approach may fail to account for externalities in transforming economies, focusing on externalities associated with supply bottlenecks and adjustment costs. Bottlenecks tend to arise whenever input requirements are stochastic and the opportunity cost of holding inventories is high. They are likely to become prevalent in the state industrial sector once budget constraints are hardened and credit markets begin to function properly, since the creditworthiness of state enterprises is limited by outdated production technologies. The analysis recognizes that producers have incentives to form pooling arrangements, supported potentially by market mechanisms, for reallocating stocks of critical inputs. It is shown, however, that such arrangements do not eliminate the externalities, and that the externalities rise in a nonlinear manner with the opportunity cost of holding inventories. The externalities associated with bottlenecks and adjustment costs provide a case for subsidizing the costs of critical inputs for the state industrial sector.

Albers, Heidi, J.

PD July 1993. **TI** Valuation and Management of Tropical Forests: A Theoretical and Empirical Analysis. **AU** Albers, Heidi, J.; Fisher, Anthony C.; Hanemann, W. Michael. **AA** Albers: Stanford University. Fisher and Hanemann: University of California, Berkeley. **SR** University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 681; Department of Agricultural and Resource Economics, 313

339

Giannini Hall, UC Berkeley, Berkeley, CA 94720. **PG** 23. **PR** $9.00. **JE** H41, Q30, Q32. **KW** Valuation. Management. Tropical Forests. Deforestation. Land Utilization.

AB Tropical forests provide a wide range of services to humankind (Repetto, 1988; Peter, Gentry, and Mendelsohn, 1989; and Reid and Miller, 1989). Yet, as documented in these and other sources, the forests are under threat. Repetto observes that, since World War II, deforestation has shifted from temperate to tropical forests and that, in most developing countries today, deforestations is accelerating. At 1981-1985 annual rates of deforestation, there are a number of countries where forests will disappear within 30 years. Others, having larger reserves, are losing vast areas every year. A question that naturally arises is, given the value of the tropical forest resource, why is it being destroyed? The answer, it seems to us, is that a very substantial part of the value simply does not get counted, either because it is hard to measure or because it is not captured by those who make the decisions on deforestation. The latter reason has been discussed at length elsewhere (see, for example, Binswanger 1991). Here, we focus on the issue of measurement, by providing a framework for a more complete valuation of tropical forests.

Ammer, John

PD August 1993. **TI** Macroeconomic Risk and Asset Pricing: Estimating the APT with Observable Factors. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper:448; Division of International Finance, Board of Governors of the Federal Reserve System, Washington DC 20551. **PG** 25. **PR** no charge. **JE** E44, G12. **KW** Arbitrage Pricing Theory. Asset Pricing. Factor Models. Firm Size Effect.

AB This paper develops and applies a new maximum likelihood method for estimating the Arbitrage Pricing Theory (APT) model with observable risk factors. The approach involves simultaneous estimation of the factor loadings and risk premiums and can be applied to return panels with more securities than time series observations per security. Observable economic factors are found to account for 25 to 40 percent of the covariation in U.S. equity returns, and the APT pricing restrictions cannot be rejected for most sample periods. A significant "firm size anomaly" is measured, but it may be partly due to sample selection bias.

PD August 1993. **TI** Measuring International Economic Linkages with Stock Market Data. **AU** Ammer, John; Mei, Jianping. **AA** Ammer: Board of Governors of the Federal Reserve System. Mei: New York University. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Paper: 449; Division of International Finance, Board of Governors of the Federal Reserve System, Washington DC 20551. **PG** 18. **PR** no charge. **JE** F36, E44, G12. **KW** International Stock Markets. Variance Decomposition. Time-Varying Risk Premia.

AB The covariance between domestic and foreign equity return innovations is decomposed into components associated with news about future real and financial variables. In an application to fifteen national stock markets, we find that news about future dividend growth tends to be more highly correlated than contemporaneous output measures, suggesting that there are lags in the international transmission of real economic shocks. In addition, results from a longer sample

period suggest that both real and financial linkages between the U.S. and the U.K. appear to have increased after the Bretton Woods currency arrangement was abandoned in the early 1970's.

Angehrn, Albert A.

PD May 1993. **TI** Business Navigator: The Next Generation of Management Development Tools. **AU** Angehrn, Albert A.; Doz, Yves L.; Atherton, Jill E. M. **AA** INSEAD. **SR** INSEAD Working Papers: 93/37/TM/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 31. **PR** not available. **JE** A23, M10. **KW** Learning Tools. Management Education. Teaching Methods.

AB Today's management education methods were developed in response to the stable and predictable business environment of the 1960's, 1970's and early 1980's. The new model of the business world is turbulent and characterized by unpredictability, uncertainty, flexible structures and information overload. A new generation of pedagogical tools combine a richer form of learning with the potential of modern technology to better prepare managers for the challenges of today's and tomorrow's business environment. In this paper we propose a model for the next generation of learning tools - the Business Navigator Model. This model projects managers into a virtual business environment. This paper provides insights into the pedagogical objectives underlying the Business Navigator Method, the evolutionary approach we are taking to implement this vision and the lessons learned from our experiences to date.

PD not available. **TI** DSS Research and Practice in Perspective. **AU** Angehrn, Albert A.; Jelassi, Tawfik. **AA** INSEAD. **SR** INSEAD Working Papers: 93/04/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 16. **PR** not available. **JE** C88. **KW** Decision Support Systems. Decision Making.

AB The aim of this paper is to assess the state-of-the-art in the Decision Support Systems field from both a research and a practice perspective. Three main dimensions of DSS research and practice are addressed: 1) supporting human decision-making processes, 2) integrating DSS into the organizational context, and 3) identifying new application domains. The related analysis and discussion provides a better understanding of past developments in the DSS field and insights into future evolution patterns.

Artis, Michael J.

PD August 1993. **TI** The Stabilizing Effect of the ERM on Exchange Rates and Interest Rates: An Empirical Investigation. **AU** Artis, Michael J.; Taylor, Mark P. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/67; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** F33, E43, F42. **KW** Exchange Rate Mechanism. Rate Volatility.

AB This paper applies nonparametric test procedures to test for a shift in the volatility of nominal and real exchange rates for ERM members and nonmembers. The results imply a reduction in volatility for the ERM members, especially during the second half of the period of operation of the ERM. We also demonstrate that this enhanced stability was not bought at the expense of increased interest rate volatility. The issue of

interest rate volatility during sterling's participation in the ERM is also examined.

Ashley, Richard

AB While many of us recognize that an examination of postsample model forecasting performance is an essential element of any serious time series modeling scheme, in practice postsample model validation is the exception rather than the rule. This is partly due to the difficulty of obtaining credible statistical inferences on ratios of the mean square error or mean absolute error of components of short, correlated, vector-valued time series and partly due to a concomitant uncertainty as to how large a postsample period is necessary. The algorithm described here uses the bootstrap and related re-sampling based techniques to obtain credible statistical inferences on functions of such time series, conditional on the assumption that the series can be adequately represented by a low-order VAR. The algorithm can (optionally) correct for small-sample bias in the estimate VAR coefficients and produces inferences which explicitly allow for the probable sampling errors in these coefficient estimates.

AB The model selection and Granger-causality literature have focused almost exclusively on in-sample tests which can easily be biased by typical specification-search activity. Recognizing that this is partly due to the difficulty of obtaining credible statistical inferences on ratios of the mean square error or mean absolute error of components of short, correlated, vector-valued time series and partly due to a concomitant uncertainty as to how large a postsample period is necessary, this paper attempts to rectify the situation by explicitly illustrating the applicability of a statistical inference algorithm developed in Ashley (1992). That algorithm uses the bootstrap and related re-sampling based techniques to obtain credible statistical inferences on functions of such time series, conditional on the assumption that the series can be adequately represented as a low-order VAR. An application is given to a (postsample) Granger-causality testing problem explicitly demonstrating that credible postsample statistical inference and model validation is now feasible.

Atherton, Jill E. M.

Atkeson, Andrew

AB This paper describes the efficient allocation of consumption and work effort in an economy in which workers face idiosyncratic employment risk and considerations of moral hazard prevent full insurance. We impose a lower bound on the expected discounted utility that can be assigned to any agent from any date onward, and show, with this feature added, that the efficient unemployment insurance scheme induces an invariant cross sectional distribution of individual entitlements to utility. The paper thus provides a simple prototype model suited to the study of the normative question: what is the tradeoff between equality and efficiency in resource allocation?.

Attfield, C. L. F.

AB The multivariate framework developed by King et al. (1991) is used to investigate the importance of alternative macroeconomic shocks in the United Kingdom business cycle. Our broad finding is that, in contrast with evidence for the United States, the balanced growth shock plays a major role in explaining output variability over business cycle frequencies. Other shocks, notably a real interest rate shock and a long-run neutral inflation shock appear to play only a very minor role.

AB The paper constructs the Deaton and Muellbauer (1980) "Almost Ideal Demand System" within the framework of an integrated multivariate time series model. The demand system is estimated using Phillips (1991) triangular error correction procedure. Tests for homogeneity and symmetry of the demand system are developed. System cointegration tests imply that there are only two permanent stochastic trends which are common to all the variables. These trends are isolated and analyzed.

Aucoin, Peter

D73. **KW** Electoral Reform. Canada. Party Financing.

AB In this paper I outline the proposals for reforming Canadian electoral democracy presented by the Royal Commission on Electoral Reform and Party Financing in it 1992 report, analyze the politics of electoral reform and assess the prospects for reform in light of the recommendations of this commission. Before doing so, I describe briefly the strategic approach adopted by commissioners in the performance of their responsibilities.

Auerbach, Alan J.

PD July 1993. **TI** Reassessing the Social Returns to Equipment Investment. **AU** Auerbach, Alan J.; Hassett, Kevin A; Oliner, Stephen D. **AA** Auerbach: University of Pennsylvania and National Bureau of Economic Research. Oliner and Hassett: Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Working Paper: 4405; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 14. **PR** $5.00. **JE** O40, O47. **KW** Economic Growth. Growth Accounting. Solow Model. Equipment.

AB The recent literature on the sources of economic growth has challenged the traditional growth accounting of the Solow model, which assigned a relatively limited role to capital deepening. As part of this literature De Long and Summers have argued in two papers that the link between equipment investment and economic growth across countries is stronger than can be generated by the Solow model. Accordingly, they conclude that such investment yields important external benefits. We formally test the predictions of the Solow model using De Long and Summers' data. Our results cast doubt on the existence of externalities to equipment investment. In particular, we find that the empirical link between investment and growth in the OECD countries is fully consistent with the Solow model. Moreover, for De Long and Summers' full sample, the evidence of excess returns to equipment investment is tenuous.

Avouyi-Dovi, Sanvi

PD January 1993. **TI** Dynamique des taux de change a l'interieur du SME. **AU** Avouyi-Dovi, Sanvi; Laffargue, Jean-Pierre. **AA** Avouyi-Dovi: Caisse des Depoits et Consignations. Laffargue: CEPREMAP. **SR** CEPREMAP Discussion Paper: 9301; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 19. **PR** 30 Francs. **JE** F31, F33. **KW** European Monetary System. Kalman Filter. Target Zone.

AB This paper gives an interpretation of the working of the EMS in the eighties. On one hand the French franc, Belgian franc, and Irish pound, appear to have been stabilized around implicit central parities, which were revised from time to time. On the other hand, the lira and Danish crown have followed a random walk with jumps. The econometric method we have used, computes implicit central parities, the times of their realignments and the probabilities that the market gave to them for the near future. This paper is written in French.

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.

TI Aggregate Wastes in the U.S. Chemical Industries. **AU** Ayres, Robert U.; Ayres, Leslie W.

Ayres, Robert U.

PD March 1993. **TI** Industrial Metabolism of Sulfur. **AU** Ayres, Robert U.; Norberg-Bohm, Vicki. **AA** Ayres: INSEAD. Norberg-Bohm: Harvard University. **SR** INSEAD Working Papers: 93/23/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 20. **PR** not available. **JE** L65, Q25. **KW** Calcium Sulfate. Sulfurous Waste.

AB This paper reviews in quantitative terms the sources, production processes and economic uses of sulfur-based chemicals with particular emphasis on industrial uses. It discusses the environmental fate of sulfurous wastes, especially calcium sulfate. It also reviews the production of sulfur oxides via combustion processes. Data is provided mainly for the U.S.

PD April 1993. **TI** Wealth Accumulation and Economic Progress. **AU** Ayres, Robert U.; Martinas, Katalin. **AA** INSEAD. **SR** INSEAD Working Papers: 93/32/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 16. **PR** not available. **JE** O40, O47. **KW** Wealth Accumulation. Evolutionary Dynamics.

AB We argue that an evolutionary dynamic economic theory must take into account stocks of goods, not just flows of services. We also argue that in such a theory the accumulation of durable goods (i.e. wealth) is actually a key feature. Moreover under straightforward assumptions, notably the "no-loss" rule for transactions wealth is a non-decreasing function of goods and money. Explicit formulae for wealth and several derived variables (marginal values) are derived. We also show how conventional utility functions are related to the wealth function.

PD May 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: 93/33/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 20. **PR** not available. **JE** D24. **KW** Production Waste. Waste Residuals.

AB The paper is a systematic derivation of aggregate production wastes for the U.S. economy (c.1988). In principle, each industrial sector is though 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.

PD May 1993. **TI** Aggregate Wastes in the U.S. Chemical Industries. **AU** Ayres, Robert U.; Ayres, Leslie W. **AA** INSEAD. **SR** INSEAD Working Papers: 93/34/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 27. **PR** not available. **JE** D24, L65. **KW** Production Wastes. Materials Balances. Waste Residuals.

AB The paper is a systematic derivation of aggregate production wastes for the U.S. chemicals industries, SIC 28

(1975-1988). To facilitate this derivation we have classified chemicals within this sector by key element(s) from which they are derived. In principle, each is thought of as initiation 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. Unlike other sectors of the economy, knowledge of the transformation processes themselves is needed in evaluating the chemical industry. 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.

PD May 1993. **TI** Eco-Restructuring: The Transition to an Ecologically Sustainable Economy. **AA** INSEAD. **SR** INSEAD Working Papers: 93/35/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 28. **PR** not available. **JE** Q32, O11. **KW** Natural Resources. Conservation. Non-Renewable Resources.
AB This paper examines the problem of how to shift from a techno-economic "trajectory" based on exploiting natural resources - soil, water, biodiversity, climate - that, once lost, can never be replaced, to one that could lead to a future society that preserves and conserves these resources. First, it attempts to identify the most pressing questions, especially with regard to the severity of the threat and the technical feasibility of solutions. Next, it attempts to distinguish between those questions on which there is little or no scientific disagreement from those on which the evidence itself is disputed. Thirdly, it raises the most fundamental question of all: how to get from where we are to where we want to be. Fourth, it suggests some promising directions for detailed investigation.

PD May 1993. **TI** Toward a Universal Measure of Environmental Disturbance. **AU** Ayres, Robert U.; Schmidt-Bleek, F. B. **AA** Ayres: INSEAD. Schmidt-Bleek: Wuppertal Institut. **SR** INSEAD Working Papers: 93/36/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 14. **PR** not available. **JE** Q32. **KW** Energy Flux. Materials Flux. Entropy Flux.
AB In recent years the environment has increasingly been seen (and treated) as a collection of unrelated components or subsystems, rather than as an indivisible whole. This reductionist trend is dangerous. To counteract it, there is a need for simple, universal measures of the aggregate (direct and indirect) environmental disturbance associated with any given economic activity or product. Three candidates are discussed: energy flux, materials flux, and entropy flux. No single measure can be selected, in practice, on the basis of a priori considerations alone, although theory suggests that entropy flux would be the most comprehensive. It will be necessary to gather a great deal of data and compare the alternative measures in a number of specific applications. However, one significant insight arising from preliminary work is that the importance of materials fluxes has been seriously underestimated. Consequently, a clear goal of government policy and business strategy should be to increase the economic productivity of materials; i.e. to encourage "dematerialization" of products and services.

PD June 1993. **TI** Transboundary Air Pollution: An Opportunity for Innovation. **AA** INSEAD. **SR** INSEAD Working Papers: 93/41/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 11. **PR** not available. **JE** Q25, F41. **KW** Air Pollution. Wealth Transfer. Incentives.
AB The paper discusses the problem of transboundary air pollution originating in Eastern Europe as an instance where the "polluter pays principle" (PPP) is neither economically feasible nor socially desirable. In fact, the polluter cannot afford to pay. Whereas PPP would require a wealth transfer from the poorer to the richer, the "victim pays principle" has the disadvantage that, if the wealth transfer is fungible, it creates an a priori incentive for the poor country to continue to pollute so as to continue to get paid. This, in turn, creates an incentive for the victim country to finance "end of pipe" treatment technology that can be exported by the victim country. The end result may be to "lock in" unnecessarily polluting forms of industrial activity so as to guarantee continuing markets for the pollution treatment sector in the victim country.

Bagwell, Kyle
PD November 1992. **TI** The Diamond Paradox: A Dynamic Resolution. **AU** Bagwell, Kyle; Ramey, Garey. **AA** Bagwell: Northwestern University. Ramey: University of California, San Diego. **SR** University of California, San Diego Department of Economics Working Paper: 92-45; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. **PG** 26. **PR** $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. **JE** D40, D83. **KW** Search Costs. Diamond Paradox. Pricing.
AB We consider the role of repeat business in resolving the paradox of Diamond (1971). In each period, consumers engage in a sequential price search at a positive search cost. Consumers enforce pricing discipline via a simple loyalty-boycott search rule that directs future-period searches away from firms that raise prices in the current period. In consumers' best equilibria, the equilibrium price decreases continuously with the level of search costs, and the competitive outcome obtains as search costs approach zero. We show further that Rotemberg and Saloner's (1986) finding of countercyclical markups does not arise in the presence of positive search costs.

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** National Bureau of Economic Research Working Paper: 4364; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 37. **PR** $5.00. **JE** C73, F13. **KW** Free Trade Agreements. Trade War.
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.

Ball, Laurence

PD May 1993. **TI** Relative-Price Changes as Aggregate Supply Shocks. **AU** Ball, Laurence; Mankiw, N. Gregory. **AA** Ball: Princeton University. Mankiw: Harvard University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 93-13; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 28. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** E31, E10. **KW** Supply Shocks. Relative Prices. Inflation.
AB This paper proposes a theory of supply shocks, or shifts in the short-run Phillips curve, based on relative-price changes and frictions in nominal adjustment. When price adjustment is costly, firms adjust to large shocks but not to small shocks, and so large shocks have disproportionate effects on the price level. Therefore, aggregate inflation depends on the distribution of relative-price changes: inflation rises when the distribution is skewed to the right and falls when the distribution is skewed to the left. We show that this theoretical result explains a large fraction of movements in postwar U.S. inflation. Moreover, our model suggests measures of supply shocks that perform better than traditional measures, such as the relative prices of food and energy.

Bardhan, Pranab

PD May 1993. **TI** Rational Fools and Cooperation in a Poor Hydraulic Economy. **AA** University of California, Berkeley. **SR** University of California at Berkeley Center for International and Development Economics Research Working Paper: C93-015; IBER, 156 Barrows Hall, University of California, Berkeley, Berkeley, CA 94720. **PG** 17. **PR** no charge. **JE** Q15, D23, D62, H41, O12. **KW** Water Management. Evolutionary Biology. Coordination.
AB Local community-level water management is crucial for rural development in the poorest parts of the world, in South Asia and sub-Saharan Africa. Local cooperative institutions have been successful in water management in some cases, but there are numerous cases of failure. The paper draws upon the relevant lessons from the theoretical literature on cooperation in game theory, both in economics and evolutionary biology. Then it goes into the evidence from field studies by anthropologists and others on the conditions for success or failure of local cooperation. This points to some additional insights which the theoretical models are yet too constricted to incorporate.

PD July 1993. **TI** Disparity in Wages but Not in Returns to Capital between Rich and Poor Countries. **AA** University of California, Berkeley. **SR** University of California at Berkeley Working Paper in Economics: C93-017; IBER, 156 Barrows Hall, University of California at Berkeley, Berkeley CA 94720. **PG** 18. **PR** $3.50 U.S. and Canada, $7.00 foreign. **JE** F11, F12, O12, O19. **KW** Technological Gap. Learning. Specialized Inputs.
AB One of the striking features of the international economy is that while the level of average wage rates in rich countries is many times that in poor countries, their average rates of return

to capital seem to be roughly similar or the differences in them relatively very small. This cannot be fully explained away by the fact that capital is internationally much more mobile than labor. There is remarkably little movement of return-sensitive private capital between the richest and the poorest countries. In this paper we assume instead that factors of production are internationally immobile, and try to explain the observed asymmetry in the pattern of factor prices in terms of particular types of differences in production functions between rich and poor countries, in terms of differential learning learning effects and differential degrees of specialization in the sector producing intermediate inputs and services.

Bartlett, Christopher A.

TI Release the Entrepreneurial Hostages from Your Corporate Hierarchy. **AU** Ghoshal, Sumantra; Bartlett, Christopher A.

Bassett, Sheila

TI An Extended Scenario and Adjustment Model for Developing Countries. **AU** Kumar, Manmohan S.; Samiei, Hossein; Bassett, Sheila.

Bazzoni, Stefania

TI Alternative Exchange Rate Strategies and Fiscal Performance in Sub-Saharan Africa. **AU** Nashashibi, Karim; Bazzoni, Stefania.

Beaudry, Paul

PD September 1993. **TI** Monopolistic Competition, Price Setting, and the Effects of Real and Monetary Shocks. **AU** Beaudry, Paul; Devereux, Michael B. **AA** Beaudry: Boston University. Devereux: University of British Columbia and Queen's University. **SR** University of British Columbia Department of Economics Discussion Paper: 93-34; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 37. **PR** **JE** L16, L13, E32, E43. **KW** Business Cycles. Interest Rates. Money Supply.
AB This paper develops a dynamic monopolistic competition model with increasing returns to scale in which it is optimal for firms to preset prices. We examine the quantitative properties of the model when it is perturbed by monetary injections or technological shocks, and compare the predicted responses with empirical counterparts. We find that the model is capable of explaining many observations related to both monetary and real business cycles in a manner more pertinent than existing dynamic general equilibrium models. In particular, the model has a substantial internal propagation mechanism which causes a monetary injection to be followed by a persistent fall in interest rates and an increase in economic activity that lasts about three years. In effect this paper provides a quantitative confirmation of the numerous suggestions in the macroeconomic literature that increasing returns to scale and monopolistic competition are key elements in the understanding business cycle fluctuations.

Ben-Porath, Elchanan

PD September 1993. **TI** Communication in Repeated Games with Private Monitoring. **AU** Ben-Porath, Elchanan; Kahneman, Michael. **AA** Ben-Porath: Tel-Aviv University. Kahneman: Tel-Aviv University and The Hebrew University of Jerusalem. **SR** Tel-Aviv Sackler Institute of Economics

Studies Working Paper; 15/93; Department of Economics, Tel-Aviv University. Ramat Aviv 69978, ISREAEL. **PG** 24. **PR** no charge. **JE** C73. **KW** Repeated Games. Private Monitoring. Public Announcements.

AB We consider repeated games where each player can be observed by only a subset of the other players, and where players can make public announcements about the behavior of the players they observed. The paper examines the behavior of the set of sequential equilibrium payoffs, SEP, in the following three cases: (1) The payoff is a discounted sum of the one-shot payoffs and the limit of the SEPs when the discount factor tends to 1 is considered; (2) The payoff is the limsup of the means of the one-shot payoffs; (3) The payoff is the liminf of the means. It is shown that in first and second cases the SEP coincides with the set of individual rational payoffs, V, whenever each player is observed by at least two other players. In the third case the SEP and V coincide even when each player is observed by only one other player.

Benartzi, Shlomo

PD May 1993. **TI** Myopic Loss Aversion and the Equity Premium Puzzle. **AU** Benartzi, Shlomo; Thaler, Richard H. **AA** Benartzi: Cornell University. Thaler: Cornell University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4369; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** $5.00. **JE** G12, G11, G14. **KW** Prospect Theory. Risk Aversion.

AB The equity premium puzzle, first documented by Mehra and Prescott, refers to the empirical fact that stocks have greatly outperformed bonds over the last century. It appears difficult to explain the magnitude of the equity premium because the level of risk aversion necessary to justify such a premium is implausibly large. We offer a new explanation based on Kahneman and Tversky's "prospect theory". The explanation has two components. First, investors are assumed to be "loss averse" meaning they are distinctly more sensitive to losses than to gains. Second, investors are assumed to evaluate their portfolios frequently, even if they have long-term investment goals such as saving for retirement or managing a pension plan. We dub this combination "myopic loss aversion". Using simulations we find that the size of the equity premium is consistent with the previously estimated parameters of prospect theory if investors evaluate their portfolios annually.

Bensaou, M.

PD December 1992. **TI** Configurations of Inter-Organizational Relationships: A Comparison Between U.S. and Japanese Automakers. **AU** Bensaou, M.; Venkatraman, N. **AA** Bensaou: INSEAD. Venkatraman: Massachusetts Institute of Technology. **SR** INSEAD Working Papers: 92/81/FAC; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 31. **PR** not available. **JE** L22, L23, L62. **KW** Automobile Industry. Organization Theory.

AB This paper seeks to uncover dominant configurations of inter-organizational relationships across the USA and Japan in the automotive industry. We integrate relevant theoretical concepts from transaction cost economics, organization theory and political economy to develop a conceptual model that serves as the anchor to collect data on 447 buyer-supplier relationships across the two countries. We employ this model to empirically uncover a set of naturally occurring patterns of

interorganizational relationships. We discuss implications for further research pertaining to both configurations as well as investigational relationships.

Bertocchi, Graziella

PD July 1993. **TI** The Real Value of Money Under Endogenous Beliefs. **AU** Bertocchi, Graziella; Wang, Yong. **AA** Bertocchi: Brown University. Yong: Virginia Polytechnic Institute. **SR** Brown University Department of Economics Working Paper: 93-34; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 14. **PR** no charge. **JE** E00, E40. **KW** Business Cycles. Welfare Analysis. Endogenous Beliefs. Money.

AB We study an overlapping generations model where the level of confidence in money evolves endogenously as a function of aggregate real money balances. The economy can display multiple stationary equilibria where the aggregate bubble on money is stochastic and the level of confidence is partial. Steady states can be ranked by the degree of confidence, with more inefficiency being associated with less confidence. It is only under certain restrictions that the Golden Rule constitutes a steady state for the system. Finally, we show that autarky becomes unstable and complex dynamics such as cycles and chaos can emerge in our model, even under the assumption of gross substitutability.

Bhatti, M. Ishaq

PD May 1993. **TI** Testing for Subblock Effects in Multi-Stage Linear Regression Models. **AU** Bhatti, M. Ishaq; King, Maxwell L. **AA** Bhatti: Griffith University. King: Monash University. **SR** Monash Department of Econometrics Research Working Paper: 2/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 15. **PR** no charge. **JE** C42, C12. **KW** Survey Data. Hypothesis Tests. Small Samples.

AB Increasingly survey data is being used in regression analysis. If disturbance correlation arising from block and/or subblock random effects is ignored, it can lead to inefficient regression estimates and predictions as well as misleading inferences. This paper addresses the problem of testing for subblock effects in the presence of block effects in a three-stage sampling regression model. Point optimal invariant (POI) and one-sided and two-sided Lagrange multiplier (LM) tests are constructed. An empirical comparison of the sized and powers of two versions of the POI tests and the two LM tests is reported. It reveals that the true size of the one-sided LM test is about one-half of its nominal size and that the two-sided LM test lacks power. The POI tests are found to have extremely desirable small-sample properties.

Bigman, David

PD August 1993. **TI** Enterprise Arrears in Russia: Causes and Policy Options. **AU** Bigman, David; Leite, Sergio Pereira. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/61; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** P21, E44, D43. **KW** Credit. Enterprise Arrears.

AB This paper examines the causes of the large buildup of enterprise arrears in Russia during 1992, and evaluates policy options to deal with them. Noting the experience of Eastern European countries, the paper emphasizes that the settlement of

arrears through wholesale extension of credit would only achieve a temporary reduction of arrears while inviting moral hazard problems and creating expectations of future bailouts. Instead, emphasis should be placed on measures that instill financial discipline and promote necessary structural changes. These measures should be supported by adequate legislation, effective supervision, and credible sanctions against defaulting enterprises and their managers.

Binmore, Ken
PD March 1993. TI Focal Points and Bargaining. AU Binmore, Ken; Swierzbinski, J.; Hsu, S.; Proulx, C. AA Binmore: University College, London. Swierzbinski, Hsu and Proulx: University of Michigan. SR University College London Discussion Paper: 93-03; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 38. PR 3 pounds; checks payable to Dept. of Economics, UCL. JE C78, C92. KW Bargaining. Focal Points. Salience. Experiment.
AB This is a contribution to the growing experimental literature on how trial-and-error adjustment processes can establish a convention for coordinating on an equilibrium in a game. A simple bargaining game introduced by Nash is used for this purpose. Subjects are conditioned in different treatments to use four different bargaining solutions. The stability of the conditioning is then studied as the bargaining game is played over an extended period. The data obtained is unusually sharp. In the long run, the median subject behaves as though optimizing down to a fraction of a penny. The results are therefore not supportive of the view that strategic considerations in such situations can be neglected in favor of a study of fairness norms. Indeed, the equilibrium actually achieved in a session turns out to be a very good predictor of what the median subject says is "fair" in the game after play is over.

Bischof, Robert
TI From Kombinat to Private Enterprise: Two Case Studies in East German Privatization. AU Carlin, Wendy; Bischof, Robert; Von Bismarck, Gottfried.

Bjorn-Andersen, Niels
TI EDI in Europe - Empirical Analysis of a Multi-Industry Study. AU Krcmar, Helmut; Bjorn-Andersen, Niels; Eistert, Torsten; Griese, Joachim; Jelassi, Tawfik; O'Callaghan, Ramon; Pasini, Paolo; Ribbers, Peter.

Blackmon, Glenn
PD June 1990. TI The Effect of State Tort Reform Legislation on Liability Insurance Losses and Premiums. AU Blackmon, Glenn; Zeckhauser, Richard. AA Harvard University. SR Harvard John F. Kennedy School of Government Discussion Paper: 182D; John F. Kennedy School of Government, 79 J.F.K. Street, Cambridge, MA 02138. PG 24. PR no charge. JE G22, K13. KW Tort Liability. Tort Reform. Liability Insurance.
AB Markets for liability insurance were in turmoil in the mid-1980's. Premiums increased sharply, coverage was reduced, and insurers reported large financial losses. Virtually every state legislature responded in 1986 by enacting statutes that reformed the tort liability system. This paper empirically appraises the effect of those statutes on general liability and medical malpractice insurance, the two lines considered to be

in greatest "crisis" at the time. We find that tort reform had a substantial effect in stemming the increase in insurance costs. A few measures were predominantly responsible: modifying the joint and several liability rule, limiting noneconomic damages, and limiting liability or establishing immunities. Most reforms had little or no effect. We also find that the savings from tort reform were largely passed through to consumers in insurance premiums.

Blackorby, Charles
PD September 1993. TI Multi-Valued Demand and Rational Choice in the Two-Commodity Case. AU Blackorby, Charles; Bossert, Walter; Donaldson, David. AA Blackorby and Donaldson: University of British Columbia. Bossert: University of Waterloo. SR University of British Columbia Department of Economics Discussion Paper: 93-32; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG 10. PR JE D11. KW Revealed Preference.
AB It is well-known that the weak axiom of revealed preference is equivalent to the strong axiom of revealed preference for consumer demand functions in the two-commodity case. We generalize this result by showing that the weak and strong congruence axioms for demand correspondences are equivalent, if there are only two commodities.

Blanchard, Pierre
PD June 1993. TI Panel Data Modelling: A Software Review. AU Blanchard, Pierre; Matyas, Laszlo. AA Blanchard: Universite de Paris Val de Marne. Matyas: Monash University. SR Monash Department of Econometrics Research Working Paper: 5/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 25. PR no charge. JE C87, C23. KW Econometrics Software. Panel Data.
AB The use of panel data is more and more popular in economic and econometric modeling. The purpose of this paper is to help potential users to find the right computing tools for their analysis.

Blanchflower, David G.
PD June 1993. TI Did the Thatcher Reforms Change British Labour Performance? AU Blanchflower, David G.; Freeman, Richard B. AA Blanchflower: Dartmouth College, London School of Economics, and National Bureau of Economic Research. Freeman: National Bureau of Economic Research, Harvard University and London School of Economics. SR National Bureau of Economic Research Working Paper: 4384; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 19. PR $5.00. JE J51, J31, J16, E24, J64. KW Labor Market. British Labor Policy. Unemployment.
AB In this paper we evaluate the success of policies that were implemented in the 1980's that were designed to improve the workings of the UK labor market. Our primary conclusion is that the Thatcherite reforms succeeded in their goals of weakening union power; may have marginally increased employment and wage responsiveness to market conditions and may have increased self-employment. They were accompanied by a substantial improvement in the labor market position of women. But the reforms failed to improve the responsiveness of

real wages to unemployment; they were associated with a slower transition from nonemployment to employment for men; a devastating loss in full-time jobs for male workers and produced substantial seemingly noncompetitive increases in earnings inequality.

Bloch, Francis

PD August 1993. **TI** Optimal Disclosure Delay in Multistage R&D Competition. **AU** Bloch, Francis; Markowitz, Paul. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 93-35; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 14. **PR** no charge. **JE** O31, O34, L13. **KW** Multistage Patent Race. Disclosure.
AB This paper analyzes the effects of a policy of disclosure with delay on the speed of discovery and incentives to invest in a multi-stage patent race. Depending on the parameters, four equilibrium configurations are obtained. In the first, a single firm acts as a monopolist. In the second, a single firm invests at the initial stages, but the second firm joins in the race after the disclosure of the intermediate product. In the third, both firms invest when they have equal knowledge, but only the leader invests before the disclosure of the intermediate product. In the last configuration, firms always compete, except when the disclosure date is close. The determination of the optimal disclosure delay involves a tradeoff between the incentives to invest and the expected time of discovery of the final product.

Boldin, Michael

PD January 1993. **TI** An Evaluation of Methods for Determining Turning Points in the Business Cycle. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 9303; Research Department - Room 901, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. **PG** 44. **PR** no charge. **JE** E32, C53, C43. **KW** Business Cycles. Cyclical Indicators.
AB This paper reviews and evaluates different procedures for dating peaks and troughs of the business cycle. To motivate this investigation, I argue that macroeconomic research needs to give greater attention to turning points in economic activity. Two new procedures, Stock and Watson's experimental indexes of coincidental and leading indicators and applications of Markov Switching Models to the business cycle, are particularly interesting. These, as well as traditional dating procedures, are judged on the ease of replication, clarity and consistency of results, timeliness, flexibility, and the validity of underlying assumptions. Comparisons are made to the NBER chronology that many economists consider the official source for peaks and troughs. The 1990-1992 period in examined in detail. In this regard, the two newer dating methods are especially insightful because they use statistically rigorous methods to derive turning point probabilities and thereby recognize the inherent uncertainty in the data.

Bonanni, Carole

TI Customer Loyalty, Scale Economies and Economies of Scope in French Funds: Additional Evidence. **AU** Dermine, Jean; Roller, Lars Hendrik; Bonanni, Carole.

Bordo, Michael D.

PD June 1993. **TI** The Common Development of Institutional Change as Measured by Income Velocity: A Century of Evidence from Industrialized Countries. **AU** Bordo, Michael D.; Jonung, Lars; Siklos, Pierre L. **AA** Bordo: Rutgers University and National Bureau of Economic Research. Jonung: Prime Minister's Office, Sweden. Siklos: Wilfrid Laurier University. **SR** National Bureau of Economic Research Working Paper: 4379; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** $5.00. **JE** E41, C22. **KW** Money Demand. Common Features. Interest Rates.
AB Previous evidence, most recently by Bordo and Jonung (1990) and Siklos (1988b, 1991), has shown on a country-by-country basis that proxies for institutional change significantly improve our understanding of the long-run behavior of velocity and, consequently, of the demand for money. If institutional change is a common development across industrialized countries it should have a common influence on velocity whereas the same need not be true for the other principal determinants of velocity such as income and interest rates. In statistical terms, this implies that the institutional change process should be cointegrated across countries but the conventional velocity determinants need not be. The purpose of this study is to extend the existing evidence to study common features in velocity, income, and interest rates, across countries. The countries considered are Canada, the U.S., the U.K., Norway, and Sweden. Briefly, the evidence suggests support for the view that there exists a unique long-run relationship in velocity but not in income and interest rates.

Boristov, Kirill

PD May 1993. **TI** Equilibrium with Profit Rate Maximizing Producers. **AA** Borisov: Russian Academy of Sciences and CEPREMAP. **SR** CEPREMAP Discussion Paper: 9309; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 33. **PR** 25 Francs. **JE** D51, D61. **KW** General Equilibrium. Profit Rate. Technological Inefficiency.
AB We consider a general equilibrium model with producers maximizing their profit rates and using some fraction of profit for investments. Under some assumptions, a stationary-equilibrium exists. If at least one active producer uses some fraction of profit for dividends, not investing all his his profit, an equilibrium allocation is technologically inefficient. Equilibrium prices in this model can be interpreted as modified prices of production. We also consider a multi-regional variant of the model supposing, for simplicity, that there is only one primary factor - labor force - and study the equilibrium existence problem from another point of view. Namely, we fix wage rates in the regions and equalize labor demand and supply in every region by means of varying fractions of profit used for investments.

Borsch-Supan, Axel

PD July 1993. **TI** Living Arrangements: Health and Wealth Effects. **AU** Borsch-Supan, Axel; McFadden, Daniel; Schnabel, Reinhold. **AA** Borsch-Supan: University of Mannheim, Center for Economic Policy Research, and National Bureau of Economic Research. McFadden: University of California, Berkeley and National Bureau of Economic Research. Schnabel: University of Mannheim. **SR** National Bureau of Economic Research Working Paper: 4398; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** $5.00. **JE** I12, J14. **KW** Elderly. Health Status.

AB This paper investigates the choice of living arrangements among elderly Americans. It has two specific aims. First, because health is not directly measurable and can only be described by indicators such as ADLs and IADLs, it explores a new econometric approach to model the influence of the latent health status on living arrangements. Second, it exploits the NBER Economic Supplement of the Longitudinal Study on Aging to investigate the role of housing and financial wealth in the choice of living arrangements.

Bossert, Walter

Bottorff, Peggy

AB The relationship between infrastructure investment and economic growth has been studied repeatedly at both the national and regional levels. Our focus in this paper is on a single component of infrastructure, the telecommunications system. Specifically, we investigate the degree to which a state's telecommunications regulatory policies have influenced the state's economic growth. Previous research indicates that the amount of U.S. telecommunications investment is a reliable predictor of the level of U.S. economic activity at a later point in time (Cronin et al, 1991). We hypothesize that the mechanism through which regulatory policies in the telecommunications industry affect overall economic development in a state is the following two-stage process: 1. Telecommunications regulatory policies influence growth in industries that are more intensive users of telecommunications. 2. Growth in industries that are more intensive users of telecommunications influences growth in a state's aggregate output.

Boyd, John H.

AB This paper pinpoints sources of recent problems in U.S. commercial banking. The objective is to provide a context for evaluating policy options. There are three parts. The first documents how increased competition and financial innovation made banking less stable in the 1980's. The second part identifies the specific sources of the industry's difficulties over this decade. We find that the poor ex post performance by large banks provided the main stress on the system. From a variety of evidence, we conclude that this poor performance was the product of increased competition for the industry and a regulatory system that provides greater subsidies to risk-taking by large banks relative to the industry mean. The third part analyzes recent policy reforms and on-going policy options, in the light of our evidence on the main sources of problems in banking.

Bradley, Ralph

AB We design nonparametric out of sample tests for statistical dependence between two random variables. They are particularly useful for detection of misspecification, or the identification of appropriate right side variables in a regression. These tests have advantages over many of the existing tests. They are designed to be robust for non i.i.d. samples that still satisfy weak mixing conditions, and can be easily implemented with existing statistical software packages. When the tests do indicate misspecification, they guide the researcher in the necessary changes that will improve the regression specification. The first test is more efficient, but sometimes, requires more than 60 generated out-of-sample errors. The second and third test are U-Statistics whose kernel is the indicator function. These are less powerful, but are applicable to situations where there are less than 60 generated out of sample errors. One of the U-Statistics is not based on any asymptotic distribution theory.

AB We derive a consistent conditional moment test of functional form that is similar to Bierens (1990). We improve Bierens' test by using a cross validated kernel regression of the estimated residuals in place of the exponential function. The results from this test can be used to derive a more specific Lagrange Multiplier Test similar to the White Neural Test when the null hypothesis is a linear conditional expectation function. Our test offers two advantages. First the out-of-sample cross validation improves the asymptotic power of the test, and second the kernel regression might give the researcher guidance on the functional form of the misspecification.

Brayton, Flint

AB Simulations by a wide variety of empirical macroeconomic models suggest that monetary policies aimed at stabilizing nominal GDP, or a mix of price and output objectives are more successful in stabilizing aggregate prices than are policies aimed at the money stock. The reasons for this common finding have not been spelled out in the literature in part due to specification differences among the models used. This paper also extends the policy comparison to include those aimed at a primary commodity price index or at the aggregate price level itself. A small theoretical model and a large-scale empirical model are used to establish a strong rank ordering of expected performances across the four policies. The reasons for this performance ordering are sufficiently general that it is likely to hold for most data-based description of the U.S. economy.

Bresnahan, Timothy F.

AB Much of the American motor vehicle industry's evolution to its post-war oligopoly market structure took place in a dramatic wave of exit during the Great Depression. We use a new micro database to analyze shutdown behavior of establishments 1929-1935. Diffusion of an important new technology, mass production, was incomplete. Technological heterogeneity - differences between mass production plants and those still relying on older methods - predicts plant survival probabilities. Technological heterogeneity did not have its competitive impact in the obvious way: product differentiation provided more traditional plants with protection from competition. Instead, strategic dynamic forces were at work. This story, told in an econometric model of the economic forces driving shutdown, lets us illuminate two themes in the relationship between the short run and the long: how incomplete diffusion of technology affects competition in the business cycle run and how competition at the trough can affect the long run evolution of industry structure.

Bronars, Stephen G.

Broome, John

AB Many ordinalists believe that ordinalism rules out the possibility of interpersonal comparisons of wellbeing. Some ordinalists, however, have argued that interpersonal comparisons are compatible with ordinalism. They rely on "extended preferences" - the preferences a person has between alternative lives together with the personal characteristics of a person living those lives. Extended preferences will only allow interpersonal comparisons of wellbeing if everyone has the same extended preferences, and the ordinalists who rely on extended preferences have generally argued that this is so. This paper shows that their arguments are mistaken, and there is no reason to expect different people's extended preferences to be the same. Different people may have different extended preferences, because of their different values. The paper suggests an alternative basis for interpersonal comparisons.

Brown, Pamela Clark

AB Using a principal-agent model that includes a limited financial liability constraint and an upper limit on the size of the bonus, we show that a relatively simple incentive scheme that includes a target and a linear piecerate bonus for above target performance is second best optimal. The cost component of the agent's utility function is using resources as the principal prefers as opposed to how the agent prefers. Schemes similar to this optimal incentive scheme are found to induce productivity in such diverse groups as salespeople, USSR enterprise managers, research and development project managers, and construction managers. We find that properties of the production technology affect the efficiency of the bonus schemes and the range of possible optimal targets and piece rates.

Brown, Shaun

Brueckner, Jan K.

AB This paper analyzes a simple mobility-based model of mortgage lending and uses the results to illuminate the issue of mortgage points. The model predicts the points/interest rate trade-off observed in the market, and it also predicts that mobile borrowers choose low-points/high-rate contracts from the available menu, in conformance with conventional wisdom. These outcomes are shown to be a result of adverse selection, which arises because of the lender's inability to distinguish the

mobility characteristics of borrowers. Empirical evidence is also presented showing the presence of a point/interest-rate trade-off in the market. In addition, relying on a proxy variable, the results establish that borrowers choose contracts from this menu according to mobility. The individual utility function is also estimated, which allows the marginal rate of substitution between points and the mortgage interest rate to be computed for different types of borrowers.

Bryson, John
PD March 1993. **TI** The Creation and Growth of Small Business Service Firms in Post-Industrial Britain. **AU** Bryson, John; Wood, Peter; Keeble, David. **AA** Bryson: University College Wales. Wood: University College London and University of Cambridge. Keeble: University of Cambridge. **SR** University of Cambridge Small Business Research Centre Working Papers: 26; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. **PG** 31. **PR** $10.00 (L5.00); checks payable to University of Cambridge. **JE** L23, L84. **KW** Small Firms. Professional Services.
AB Using original results from the Cambridge Small Business Centre's national survey of small and medium-sized enterprises in Great Britain, the paper analyzes in depth key characteristics, performance indicators and development determinants of 850 small professional and business service enterprises, drawn from such sectors as management consultancy, computer services, personnel and market research, architects and consulting engineers, and advertising. The discussion focuses especially on the role of such small, information-intensive and professionally-based firms in supplying expertise to clients, firm origins and formation processes, market orientation, growth objectives and constraints, and the importance of subcontracting, networking and flexibility in small business service firm development.

Buiter, Willem H.
PD May 1993. **TI** Public Debt in the USA: How Much, How Bad and Who Pays? **AA** Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4362; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 40. **PR** $5.00. **JE** H62, H63, E62. **KW** Deficit. Government Spending.
AB The USA is in the middle of the pack of industrial countries as regards the public debt-GDP and public deficit-GDP ratios. The period since 1980 is the only peace time-period outside the Great Depression to see a sustained increase in the debt-GDP ratio. Subtracting net public sector investment from the conventional budget deficit is likely to overstate the government revenue producing potential of public sector investment. Public debt matters when markets are incomplete and/or lump-sum taxes are restricted. Future interest payments associated with the public debt are not equivalent to currently expected future transfer payments. Even ignoring the distortionary character of most real-world taxes and transfers, and holding constant the government's exhaustive spending program, the "generational accounts" are not a sufficient statistic for the effect on aggregate consumption of the government's tax-transfer program. Solving the immediate budgetary problems still leaves the much more serious macroeconomic problems of an undersized U.S. Federal

government sector and an inadequate U.S. national saving rate.

Burda, Michael C.
PD March 1993. **TI** Modelling Exits from Unemployment in Eastern Germany: A Matching Function Approach. **AA** INSEAD. **SR** INSEAD Working Papers: 93/22/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 25. **PR** not available. **JE** J64, J41, J38, J68. **KW** Vacancies. German Monetary Union.
AB A matching function approach is applied to unemployment exit data from a panel of Eastern German labor office districts since monetary union. With comparable West German data, such a matching function exhibits constant returns, is stable and can account for at least three-quarters of the variance of exits from unemployment. In contrast, the Eastern German matching function exhibits increasing returns and vacancies enter the function insignificantly or with incorrect sign. These estimates also differ significantly from those for the Czech Republic, discounting explanations related to the transformation per se. When the effects of special labor market measures introduced since monetary union are accounted for, Eastern German estimates resemble those of the Czech Republic, i.e. they exhibit constant to mildly decreasing returns.

Burge, Graham
PD July 1993. **TI** Habit Formation, "Catching Up With the Joneses" and the Time Series for Asset Returns. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 140; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544-1021. **PG** 30. **PR** $3.00 for U.S. mailings. $6.00 for foreign mailings. **JE** G12, D11. **KW** Risk-Free Rate. Return Variability.
AB Both habit formation (Constantinides (1990)) and "catching up with the Joneses" (Abel (1990)) preferences have been suggested as resolutions of the equity premium puzzle of Mehra and Prescott (1985). This paper examines both types of preferences as expressed by the model of Abel (1990), in alternative but related contexts. These include a resolution of Weil's (1989) risk-free rate puzzle which wonders why the risk-free rate is so low, an explanation for the market lack of variation in the risk-free return and a reasonable account of the relatively large variability of the market return over the variability of the risk-free rate through time. The substantial result of this paper is to show that the addition of habit formation or "catching up with the Joneses" cannot explain the near constant risk-free rate without abandoning the goal of explaining the large excess variability of the market return over the risk-free rate.

PD July 1993. **TI** Intertemporal Risk and Prudence Premia. **AA** Princeton University. **SR** Princeton Financial Research Center Memorandum: 141; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544-1021. **PG** 25. **PR** $3.00 for U.S. mailings. $6.00 for foreign mailings. **JE** D82, D91. **KW** Risk Premium. Uncertainty. Risk Aversion.
AB The pioneering work of Arrow (1965) and Pratt (1964) derived an abstract risk premium for an individual faced with a single source of uncertainty. This measure was atemporal and defined over wealth. Later empirical work has sought to evaluate the related concept of risk aversion in an intertemporal

context based on consumption. This paper suggests a new risk premium relevant not only to multiple sources of uncertainty, but also within an intertemporal framework in which there is "news" about future returns as well as "news" about future riskiness. The appropriate risk premium for an agent faced with this problem should reflect not only risk over next period wealth but also both of these "news" elements. It is defined over wealth but can be closely linked to preferences over consumption. Like that of Arrow and Pratt it is atemporal in nature. A prudence premium is also derived by extending the same ideas to the intertemporal marginal rate of substitution.

Caballero, Ricardo J.

PD May 1993. **TI** How High are the Giants' Shoulders: An Empirical Assessment of Knowledge Spillovers and Creative Destruction in a Model of Economic Growth. **AU** Caballero, Ricardo J.; Jaffe, Adam B. **AA** Caballero: Massachusetts Institute of Technology and National Bureau of Economic Research. Jaffe: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4370; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 53. **PR** $5.00. **JE** O31, O33, O41, L16. **KW** Technological Change. Innovation. Knowledge Stock.
AB The pace of industrial innovation and growth is shaped by many forces that interact in complicated ways. Profit-maximizing firms pursue new ideas to obtain market power, but the pursuit of the same goal by other means that even successful inventions are eventually superseded by others; this is known as creative destruction. New ideas not only yield new goods but also enrich the stock of knowledge of society and its potential to produce new ideas. To a great extent this knowledge is non-excludable, making research and inventions the source of powerful spillovers. The extent of spillovers depends on the rate at which new ideas outdate old ones, that is on the endogenous technological obsolescence of ideas, and on the rate at which knowledge diffuses among inventors. In this paper we build a simple model that allows us to organize our search for the empirical strength of the concepts emphasized above. We then use data on patents and patent citations as empirical counterparts of new ideas and knowledge spillovers, respectively, to estimate the model parameters.

Caillaud, Bernard

PD January 1993. **TI** Competing Vertical Structures: Precommitment and Renegotiation. **AU** Caillaud, Bernard; Jullien, Bruno; Picard, Pierre. **AA** Caillaud: CEPREMAP and CERAD-ENPC. Jullien:CEPREMAP and CREST-LEI. Picard: CEPREMAP and Universite de Paris X. **SR** CEPREMAP Discussion Paper: 9304; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 35. **PR** 30 Francs. **JE** C72, D43, D82, L13, L14. **KW** Principal. Agent Theory. Agency Contract. Strategic Complementarity. Imperfect Competition.
AB We consider a model where two agents, privately informed on their own characteristics, play a (normal form) game on behalf of two uninformed principals. We analyze the existence of precommitment effects through designated 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 March 1993. **TI** Analyse du Caractere Incitatif des Contrats de Transport Urbain. **AU** Caillaud, Bernard; Quinet, E. **AA** Caillaud: CEPREMAP and CERAS-ENPC. Quinet: CERAS-ENPC. **SR** CEPREMAP Discussion Paper: 9307; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 84. **PR** 35 Francs. **JE** D82, H70, L51, L92, L98. **KW** Contract Theory. Incentive. Cost Overrun. Regulation. Public Transportation.
AB Using recent developments in contract theory, this paper studies contractual agreements between city transportation departments and monopolistic firms in charge of public transportation within each city in France. Agreements are precisely described and a theoretical model is presented to explain the use of bonuses for unplanned revenues and penalties for cost overruns. The model is then estimated using quantitative data on actual agreements. Given the abstract nature of the theoretical model and the limits of the data, the desire to provide incentives for productivity explains adequately the use of penalties for cost overruns; bonuses for unplanned revenues seem, however, to rely more on incomplete information of transportation authorities on demand parameters. This paper is written in French.

Calomiris, Charles W.

PD July 1993. **TI** Corporate Finance Benefits from Universal Banking: Germany and the United States, 1870-1914. **AA** University of Illinois and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4408; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** $5.00. **JE** G24, G21, G28. **KW** Bank Regulation. Investment Banking. Universal Banking.
AB Limitations on bank consolidation and branching in the United States at an early date effectively limited the scope of commercial banks and their involvement in financing large-scale industry, and increased information and transaction costs of issuing securities. In contrast, German industry was financed by large-scale universal banks who maintained long-term relationships with firms, involving ongoing monitoring and disciplining of mangement, and underwriting. Low costs of German industrial finance are reflected in lower investment banking spreads on securities issues and a higher propensity to issue equity relative to the United States.

Campa, Jose

PD June 1993. **TI** Investment in Manufacturing, Exchange-Rates and External Exposure. **AU** Campa, Jose; Goldberg, Linda S. **AA** Campa: New York University. Goldberg: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4378; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $5.00. **JE** E22, F31, F14. **KW** Export Sales. Export Exposure. Import Exposure.
AB This paper studies the linkage 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.

PD   September 1993. TI   Why Long Horizons? A Study of Power Against Persistent Alternatives. AA   Princeton University and National Bureau of Economic Research. SR   National Bureau of Economic Research Technical Paper: 142; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. PG   not available. PR $2.00. JE   C12, C13, C15. KW   Short Horizon. Critical Values. Predictability.
AB   This paper studies tests of predictability in regressions with a given AR(1) regressor and an asset return dependent variable measured over a short or long horizon. The paper shows that when there is a persistent predictable component in the return, an increase in the horizon may increase the R squared statistic of the regression and the approximate slope of a predictability test. Monte Carlo experiments show that long-horizon regression tests have serious size distortions when asymptotic critical values are used, but some versions of such tests have power advantages remaining after size is corrected.

Card, David

PD   May 1993. TI   Wage Dispersion, Returns to Skill, and Black-White Wage Differentials. AU   Card, David; Lemieux, Thomas. AA   Card: Princeton University and National Bureau of Economic Research. Lemieux: University of Montreal and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 4365; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   28. PR $5.00. JE   J31, C52, J15. KW   Wage Structure. Return to Skill.
AB   During the 1980's wage differentials between younger and older workers and between more and less educated workers expanded rapidly. Wage dispersion among individuals with the same age and education also rose. A simple explanation for both sets of facts is that earnings represent a return to a one-dimensional index of skill, and that the rate of return to skill rose over the decade. We explore a simple method for estimating and testing "single index" models of wages. Our approach integrates 3 dimensions of skill: age, education, and unobserved ability. We find that a one-dimensional skill model gives a relatively successful account of changes in the structure of wages for white men and women between 1979 and 1989. We then use the estimated models for whites to analyze recent changes in the relative wages of black men and women.

Carlin, Wendy

PD   January 1993. TI   From Kombinat to Private Enterprise: Two Case Studies in East German Privatization. AU   Carlin, Wendy; Bischof, Robert; Von Bismarck, Gottfried. AA   University College, London. SR   University College London Discussion Paper: 93-02; Department of Economics. University College London, Gower Street, London WC1E 6BT, ENGLAND. PG   27. PR   3 pounds; checks payable to Dept. of Economics, UCL. JE   L52, L33, P31, P21, P11. KW   Privatization. Transition. East Germany. Supervisory Board.
AB   A unique feature of the East German experience of transition has been the role played by the government agency the Treuhandanstall (THA) in privatizing a substantial proportion of the former state-owned enterprise sector. This article presents two detailed case studies illustrating that process. In each case the transformation is virtually complete: enterprises have been privatized or are in liquidation. Both cases lie at the highly problematic end of the spectrum of enterprises to be restructured and privatized. The first is a heavy machinery Kombinat which was highly dependent on the former Soviet Union for its sales. This case shows how the Treuhand has used the German corporate governance system of two-tier boards to delegate and decentralize the restructuring task to supervisory boards of the enterprises. The second case is the microelectronics Kombinat Mikroelektronik Erfut. It highlights the way the THA has dealt with the fate of a high technology and possibly strategic industry. An important theme running through both case studies is that the number of potential buyers for these enterprises in international terms is very small. Both cases illustrate that the Truehand has not been offering for sale what a economist would think of as a firm. Rather, it has been offering combinations of physical assets, human capital and cash in exchange for management/organizational capabilities, technology and markets or market access to investors viewed as likely to transform the East German enterprise into an internationally competitive firm.

Caroll, Christopher D.

PD   August 1993. TI   Saving and Growth: A Reinterpretation. AU   Caroll, Christopher D.; Weil, David N. AA   Caroll: Federal Reserve Board of Governors. Weil: Brown University. SR   Brown University Department of Economics Working Paper: 93-36; Department of Economics, Brown University, Providence, Rhode Island 02912. PG   48. PR   no charge. JE   E21, O40. KW   Saving. Growth. Habit Formation.
AB   We examine the relationship between income growth and saving using both cross-country and household data. At the aggregate level, we find that growth Granger causes saving, but that saving does not Granger cause growth. Using household data we find that household with predictably higher income growth save more than households with predictably low growth. We argue that standard Permanent Income models of consumption cannot explain these findings, but that a model of consumption with habit formation may. The positive effect of growth on saving implies that previous estimates of the effect of saving on growth may be overstated.

Caserta, Maurizio

PD   July 1993. TI   Accumulation, Capacity Utilisation and the Medium Term. AA   University of Catonia, Italy. SR   University College London Discussion Paper: 93-08; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG   18. PR   3 pounds; checks payable to Dept. of Economics, UCL. JE   O40, E12. KW   Accumulation. Effective Demand.

Medium Term.

AB This paper aims at illustrating an application of the concept of the medium term in the theory of growth. The relevant time run for this concept is longer than that implicit in the short term, because in the medium term the effect of investment on capacity is taken into account. However, in the medium term, capacity is not entirely adjusted to demand in the same way as it is in the long term. The paper argues that a meaningful medium-term analysis is possible once appropriate assumptions concerning long-term expectations are made. It is also argued that such analysis can be associated with a body of literature which has attempted to bring the Keynesian principle of effective demand to explain growth more effectively than previously done. The Keynesian element exists also at the level of methodology. To assume that long-term expectations are given while medium-term equilibrium is determined mirrors Keynes' treatment of short-term equilibrium, where long-term expectations are also given.

Cases, C.

PD May 1993. TI Estimation d'un Modele de Sortie de Chomage a Destinations Multiples. AU Cases, C.; Lollivier, S. AA INSEE. SR Unite de Recherche Document de Travail ENSAE/INSEE: 9327; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris Cedex 14, FRANCE. PG 18. PR no charge. JE J64, J42, C41. KW Duration Models. Unemployment.

AB Individual characteristics are often taken into account in duration models for people leaving unemployment. Less often introduced is the different states a person may enter on leaving unemployment. However, there is empirical evidence of segmentation of labor market between "regular" and "marginal" jobs. In the study, we estimate a duration model having three possible states on leaving unemployment: regular work, marginal work, and inactivity. Both durations and effects of exogenous variables are different in the three possibilities. The paper is written in French.

PD July 1993. TI A Structural Model of Transition from Unemployment with Multiple Issues. AU Cases, C.; Lollivier, S. AA INSEE. SR Unite de Recherche Document de Travail ENSAE/INSEE: 9332; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 20. PR no charge. JE C41, J64. KW Duration Analysis. Unemployment. Job Search.

AB The estimation of unemployment duration models is a classic topic of labor econometrics. The search behavior is generally based on the theoretical model of Lippman-MacCall (1976). The decision to take a job implies an inter-temporal choice in which a comparison is made between the wage offer and the reservation wage of the agent. In the basic model, all the parameters remain constant and both reservation wages and hazard function are time independent. Van Den Berg (1990) has proposed a non stationary representation in which parameters depend on time before being constant. However, in the estimation only benefits decrease, offers being time independent. This paper has two purposes. First, we extend Van Den Berg's framework, allowing wage offers to be time dependent. thus reservation wage is not necessarily decreasing and hazard function can decrease or increase with time. Moreover, our model has three outcomes; regular jobs, marginal jobs and inactivity. This allows us to distinguish between the two segments of labor market, since empirical studies have proved the heterogeneity of the search behavior according to the issue. Our estimation results show that wage offers increase during the first six month in in the two segments of labor market and then decrease. Reservation wage is constant during this semester before a decrease of about one quarter after three years. The effect of benefits is significant but limited.

Castro, Juan, P.

TI Optimal Management of Groundwater With Increasing Demand. AU Rubio, Santiago J.; Martinez, Constantino; Castro, Juan, P.

Cavanagh, Chris

PD May 1992. TI Rank Estimators for Monotone Index Models. AU Cavanagh, Chris; Sherman, Robert P. AA Cavanagh: Columbia University. Sherman: Bellcore. SR Bellcore Economics Discussion Paper: 84; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE C10, C13. KW Rank Estimators. Index Models. Asymptotic Theory.

AB We introduce a class of rank estimators of scaled coefficients in monotonic index models. No parametric assumptions about stochastic components are required, and structural components need not be fully specified. In addition, the estimators have attractive computational properties. For example, only $O(n \log n)$ operations are required to evaluate a maximand. We establish square root n-consistency and asymptotic normality, and provide the general form and consistent estimators of asymptotic covariance matrix. In the special case of the binary choice model, we make a one-step adjustment to obtain an inexpensive estimator attaining the semiparametric efficiency bound. We also provide a generalization covering single equation multiple indices models satisfying certain monotonicity properties. An analogue of consistency when all explanatory variables are categorical is established, and an application is presented.

Chakravorti, Bhaskar

PD March 1992. TI Credible Implementation. AU Chakravorti, Bhaskar; Wilkie, Simon; Corchon, Luis C. AA Chakravorti and Wilkie: Bellcore. Corchon: Universida de Alicante and Institio Valenciano de Investigaciones Economicas. SR Bellcore Economics Discussion Paper: 76; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE C72, C79, D60, D70. KW Implementation. Credibility. Sequential Equilibrium.

AB The theory of mechanism design and implementation abounds with clever mechanisms whose equilibrium outcomes are optimal according to some social choice rule. However, the cleverness of these mechanisms relies on intricate systems of rewards and punishments off-the-equilibrium path. Generally, it is not in the designer's best interest to go through with the reward-punishment in the "subgame" arising from some disequilibrium play. This would make the mechanism's outcome function non-credible. In the context of exchange economies, we define an appropriate notion of "credible" implementation and show that (a) the non-dictatorial Pareto correspondence can be credibly implemented (b) there exists no credibly implementable Pareto-efficient and individually rational social choice rule and (c) there exists no credibly implementable fair social choice rule. We derive necessary and

sufficient conditions for credible implementability of choice rules. The main implication is paradoxical: it is sub-optimal for the designer to be endowed with "too much" information about the economy.

AB The following questions are addressed: What are the bounds on the mechanism designer's ability to implement social objectives when the agents indulge in (possibly mediated) communication prior to participation in the mechanism? Moreover, how do these bounds compare with those obtained in the absence of communication opportunities? The paper (i) shows that a sequential structure is essential to the study of communication and identifies an appropriate equilibrium concept--sequential mediated equilibrium;(ii) defines the problem of implementation of social performance standards in environments with communication and provides necessary and sufficient conditions for implementability; and (iii) examines the normative implications of these conditions. It is shown that, in general, no interim individually rational and Pareto-efficient performance standard is implementable. However, when there is complete information among economic agents, pre-play communication does not pose and additional constraints on the designer; any standard that is implementable in the absence of communication remains implementable even in the presence of communication opportunities.

AB A game with cheap talk involves payoff-irrelevant moves in initial rounds followed by a single payoff-relevant round. On the other hand, a repeated game has payoff-relevant moves in every round. We propose a mechanism which is on the boundary between these two cases; in every round, moves have payoff-relevance in probability; over the entire horizon, the game is one-shot in expectation. We show that such a probabilistic cheap talk mechanism completely resolves the one-shot prisoners' dilemma. It achieves efficiency without perfect verifiability of strategies by any third-party; it resolves inefficiencies arising from multiplicity of equilibria by achieving coordination on a unique efficient equilibrium; and no third-party enforcement is required. The mechanism represents a very simple and natural process of pre-play communication in which players are "kept on their toes" while they communicate. We also discuss the relation of the solution to the players' bargaining strengths, applicability to environments with discounting, and implications for the study of repeated games. The surprising aspect of the mechanism is that not only are payoffs distributed only once but, in equilibrium, the players do not actually indulge in communication and commit to an efficient strategy once and for all.

AB In this paper, we apply the concept of "probabilistic cheap talk" introduced in Chakravorti, Conley and Taub (1992) to a variety of simple economic problems in public economics and industrial organization. We consider both normative and positive applications of PCT. In the mechanism design applications we focus on problems which have a single Nash equilibrium which is Pareto-dominated by other outcomes. We show that adding a PCT structure to the pre-existing game transforms it into a multi-stage game with a single Pareto-dominant, efficient subgame-perfect equilibrium. Nevertheless the game remains essentially one-shot. Payoffs are distributed once and only once and in equilibrium, strategies are chosen once and for all. Thus there is no cheap talk in equilibrium. Our focus is on resolving inefficient outcomes when the agents' strategy spaces and outcome rules are given by pre-existing institutions, and the choices of agents are unverifiable by a third-party. In this sense, our mechanisms dominate those available from implementation theory. On the other hand, our mechanisms require more knowledge of agents' preferences, and improve upon the status quo in a somewhat weaker manner than do those from the implementation literature. By way of a positive application we show how PCT can resolve the classic chain-store paradox without resorting to explanations that require irrationality or "craziness" on the part of any agent.

AB This paper studies a special class of differential information games with pre-play communication -- games with "cheap play." We consider problems in which there are several rounds of payoff-irrelevant publicly observable choice (or discussion) of actions, followed by a final round in which actions are binding and payoff relevant. A natural focal subset of equilibria of such games is one that consists of equilibria involving no regret. Such games were first studied by Green and Laffont (1987), where a criterion called posterior implementability is introduced with the intention of identifying regret-free equilibria in games with cheap play. This is simply a restriction on the Bayesian equilibrium of the underlying one-shot game. If indeed such a restriction does characterize regret-freeness, then the analytics of such situations would be enormously simplified since one can ignore the messy extended-form of the cheap play game; merely equilibrium has a subtle distinction; regret-freeness in moves and regret-freeness in assessments. We show that the former causes the extended-form to be irrelevant; posterior implementability completely characterizes equilibria with regret-freeness in moves. The latter, on the other hand, does not yield a similar principle: the extended-form cannot be ignored.

Conley, John P. **AA** Chakravorti: Bellcore. Conley: University of Illinois. **SR** Bellcore Economics Discussion Paper: 91; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. **PG** not available. **PR** not available. **JE** C70. **KW** Prisoners' Dilemma. Bargaining.
AB The infinitely repeated prisoners' dilemma has a multiplicity of unranked equilibria -- leading to a generalized Battle of the Sexes problem of coordinating on a single efficient one. A natural method of achieving coordination is for the players to bargain over the set of equilibrium outcomes. Unfortunately, there is a multiplicity of bargaining solutions; and each player may have a favorite one. In the event of disagreement over the bargaining solutions, it is reasonable to expect them to randomize over them. This paper asks the following question: do the players risk choosing an inefficient outcome by resorting to such randomizations? In general, randomization over points in a convex set yields interior points. We show that if the candidate solutions are the two most frequently used -- the Nash and the Kalia-Smorodinsky solutions -- then for any prisoners' dilemma, this procedure guarantees coordination on an efficient outcome.

AB The following problem is considered. There are several user who send jobs to an M/M/1 queue, and have privately observed information relating to their benefits from the competition of their respective jobs and their costs due to waiting in the queue. Each user's benefits and costs are unknown to the queue manager and to other users. The manager's objective is to achieve "optimal" flow control, where the optimality depends on arriving at an appropriate trade-off between delay and the job arrival rate assigned to each user: the allocations should be such that no user can be made better off by a re-allocation without hurting at least one other user. Since the optimality calculation requires knowledge of the users' private information, we propose an algorithm that converges to the optimum, while inducing users to reveal information relating to their benefits and costs truthfully, and balances the manager's budget. Earlier work on this problem (1) has produced a flow control algorithm that requires the queue manager to incur a potentially huge deficit; this leads to several theoretical and practical problems.

AB We propose a solution concept designed to characterize stable agreements in games in which coalitions can make non-binding self-enforcing deviations from such agreements. We allow for "universal" coalition formation, i.e. the validity of a deviation is checked not only against further deviations by subsets of the deviating coalition, convincing players from the complementary coalition to deviate. The blocking device introduced here is weaker than that associated with Bernheim, Peleg and Whinston's (1987) concept of Coalition-proof Equilibrium (CPE) and stronger than that associated with an equilibrium concept based upon Greenberg's (1989) Coalitional Contingent Threats. Our solution concept has no containment relationship with a priori, the unilateral best-response property is not a necessary condition for stability (in the sense of von Neumann-Morgenstern) stable sets in the presence of universal coalition formation. The key aspect of our solution concept is a "lateral induction" condition, which is related to the idea of forward induction in sequential games. Finally, we present applications where our solution concept outperforms CPE in providing plausible predictions; these include the analyses of hierarchies, standards-setting negotiations and renegotiation of contracts.

AB This paper is motivated by Rubinstein (1980) which introduces a solution concept for voting games called the "stability set" which incorporates the idea that prior to joining a winning alternative being voted for one alternative over another, a voter will be far-sighted; the alternative being voted in may subsequently be replaced by one that makes the voter worse off than the status quo. For a wide class of voting problems the stability set is non-empty -- a remarkable result since it "resolves" the well-known Paradox of Voting. We argue here that this resolution is based on a model of far-sightedness that has several drawbacks: (i) the voters are myopic in the sense that they ignore far-sightedness on the part of others; and (ii) voters look only one step ahead and do not consider events arbitrarily far ahead. To address these issues, we propose a model of "consistently far-sighted" voting in terms of a labelling system. A labelling system always exists in any social system; though this, we show, does not guarantee the existence of a stable outcome. Furthermore, by example, we show that consistent far-sightedness can have an impact in terms of expanding the set of stable outcomes. However, the impact is limited; for a wide class of "decisive" social systems (those in which a winning coalition exists for any decision between every pair of alternatives), we prove a universal instability theorem; a social system with an empty core can never admit a stable outcome. Hence, in contrast to Rubinstein (1980), consistent far-sightedness has virtually no contribution towards ensuring stability in voting games.

Chaloupka, Frank J.

Chen, Xiaohong

JE C10. **KW** Mixingale Processes. Asymptotic Theory Robbins - Monro Procedure.
AB Let H be an infinite-dimensional real separable Hilbert space - Given an unknown mapping (M:H -> H) that can only be observed with noise, we consider two modified Robbins-Monro procedures to estimate the zero point of theta sub zero in the Hilbert space of M. These procedures work in appropriate finite dimensional subspaces of growing dimension. Almost-sure convergence, functional central limit theorem (hence asymptotic normality), law of iterated logarithm (hence almost-sure loglog rate of convergence), and mean rate of convergence are obtained for Hilbert space-valued mixingale, theta-dependent error processes.

Chen, Yongmin

PD August 1993. **TI** Asking Prices as Commitment Devices. **AU** Chen, Yongmin; Rosenthal, Robert. **AA** Chen: Washington University. Rosenthal: Boston University. **SR** Boston University Industry Studies Program Discussion Paper Series: 42; Department of Economics, Boston University, Boston, Massachusetts 02215. **PG** 28. **PR** no charge. **JE** D83, L12, L13. **KW** Ceiling Price. Commitment Device. Floor Price.
AB What is communicated by the level of an asking price in a market such as those for housing and automobiles in the U.S.? This paper explores in several models the implications of the hypothesis that an asking price is a ceiling to which a seller commits in order to provide incentives for potential buyers to incur search costs. Having attracted such a potential buyer, the seller must also determine how low to set the floor price, below which it is preferable to wait for another customer. This decision is affected by expectations about the characteristics of future buyers, which are, in turn, affected by the asking price. All of this is embedded in models of monopoly and of duopolistic competition.

Chichilnisky, Graciela

PD January 1992. **TI** The Existence of an Optimal Path in a Growth Model with Endogenous Technical Change. **AU** Chichilnisky, Graciela; Gruenwald, Paul F. **AA** Chichilnisky: Columbia University. Gruenwald: International Monetary Fund. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-10; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 6. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE** O41, D92, O32. **KW** R&D. Endogenous Technology. Non-Convexity.
AB Consider an infinite horizon growth model where the production function changes through time in response to investment in R&D (Gruenwald). At the end of each period the sole good can be either consumed, saved as next period's capital, or invested in a research sector to increase next period's productivity. Since each unit of capital becomes more productive with R&D, the overall "production possibilities frontier" across time may exhibit increasing returns to scale. The problem is to find conditions which assure the existence of an optimal consumption-accumulation-R&D investment path. Mathematically, the problem is one of maximizing a (non-linear) functional over a function space, the space of feasible paths, which is in general a non-convex set. The feasible paths satisfy a difference equation representing capital accumulation,

R&D investment and technological change through time. The problem is of interest because technology is endogenously determined, and because of its possible non-convexity.

PD September 1992. **TI** Existence and Optimality of a General Equilibrium with Endogenous Uncertainty. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-11; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 23. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE** D51, C62, D82. **KW** Price Uncertainty. General Equilibrium Model.
AB The paper defines a concept of general equilibrium in markets with uncertainty about prices, and proves the existence of such an equilibrium under standard conditions on endowments and preferences. In the market equilibrium defined here the state space which represents price uncertainty is defined endogenously as part of the equilibrium. Agents do not know the possible equilibrium prices a priori. Theorem 2 establishes the existence of an equilibrium, consisting of a state space, the corresponding asset markets, and prices yielding a fully insured and Pareto efficient allocation which clears all markets.

PD December 1992. **TI** Markets, Arbitrage and Social Choice. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-12; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 27. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE** D51, D71. **KW** Limited Arbitrage. Competitive Equilibrium.
AB The paper establishes a clear connection between equilibrium theory and social choice theory by showing that, for a well defined social choice problem, the conditions which are necessary and sufficient to solve this problem are the same the conditions which are necessary and sufficient to establish existence of a competitive equilibrium. We define a condition of limited arbitrage on the preferences and the endowments of an Arrow-Debreu economy. This bounds the utility gains that the traders can afford from their initial endowments. Theorem 2 proves that limited arbitrage is necessary and sufficient for the existence of a social choice rule which allocates society's resources among individuals in a manner which depends continuously and anonymously on their preferences over allocations, and which respects unanimity. Limited arbitrage is also necessary and sufficient for the existence of a competitive equilibrium in the Arrow-Debreu economy, with or without bounds on short sales, Theorem 7.

PD December 1992. **TI** Traditional Comparative Advantages vs. Economies of Scale: NAFTA and the GATT. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-13; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 19. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE** F12, F13. **KW** Free Trade Agreements. Trade Liberalization. Regional Trade.
AB The formation of trading blocks can help or hinder the global liberalization of trade. A determining factor is whether

trade within the block is organized around traditional comparative advantages, or around economies of scale. Regional free trade agreements such as NAFTA can be either complements to, or substitutes for, the GATT negotiations. They are substitutes when the regional agreements are based on traditional comparative advantages, with each regional market developing market power and the corresponding economic incentives to impose tariffs on the rest of the world. Alternatively, regional trade agreements can be complementary to global trade negotiations. This occurs when the trading blocks lead to trade based on the exploitation of economies of scale, rather than to trade based on traditional comparative advantage. Economies of scale produce incentives for expanded trade, and these can defeat the usual "optimal tariff" incentives to impose tariffs and restrict trade. We discuss policy implications for free trade in the Americas.

PD   December 1992. **TI**   Limited Arbitrage is Necessary and Sufficient for the Existence of a Competitive Equilibrium. **AA**   Columbia University. **SR**   Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-14; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG**   23. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE**   D51, C62. **KW**   Limited Arbitrage. Arrow-Debreu Economy.
AB   A condition of limited arbitrage is defined on the endowments and the preferences of the traders in an Arrow-Debreu economy. It bounds the diversity of the traders in the economy and the gains from trade which they can afford from initial endowments. Theorem 1 shows that limited arbitrage is necessary and sufficient for the existence of a competitive equilibrium, when consumption sets are either positive orthants or the whole euclidean space. The results apply therefore to market economies with or without bounds on short sales. Theorem 6 establishes that an Arrow-Debreu economy has a competitive equilibrium if and only if every subeconomy with $N + 1$ traders does, where N is the number of commodities.

PD   January 1993. **TI**   North-South Trade and the Dynamics of Renewable Resources. **AA**   Columbia University. **SR**   Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-15; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG**   28. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE**   F11, F10, D23, Q20. **KW**   Environmental Resources. Conservation. Property Rights.
AB   The global environment can be described by the physical dynamics and the economic use of the earth's resources. It has become, to a certain extent, a North-South issue. Developing countries tend to specialize in the production and the export of goods which deplete environmental resources such as rain forests, or minerals whose combustion leads to the emission of greenhouse gases. Most of these resources are imported and consumed by the industrial countries. Are trade policies based on the traditional comparative advantages of developing countries compatible with environmental preservation? This paper studies issues within a two region world economy where the North represents the industrial countries and the South the developing countries. There are two significant departures from traditional trade theory. One is that one input to production is an environmental resource. The second major departure from

traditional theory is that the regions are characterized here by their property rights regimes for the environmental resource.

PD   January 1993. **TI**   Global Environment and North-South Trade. **AA**   Columbia University. **SR**   Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-16; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG**   36. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE**   F10, F11, D23, Q20. **KW**   Renewable Resources. Conservation. Property Rights.
AB   Why has the global environment emerged as a North-South issue? Why do developing countries specialize in the production and the export of goods which tend to deplete environmental issues? Is it possible to protect resources without interfering with free markets? How do taxes on the use of environmental resources affect North-South trade? Are trade policies based on traditional comparative advantages compatible with environmental preservation? The aim of this paper is to propose answers to these questions. It does so by studying patterns of North-South trade in an world economy where the North has better-defined property rights for environmental common property resources than does the South. I consider a class of environmental issues arising from the use of environmental resources as inputs to the production of traded goods.

PD   March 1993. **TI**   Arbitrage, Equilibrium and the Pareto Frontier in L sub p and Sobolev Spaces. **AU**   Chichilnisky, Graciela; Heal, Geoffrey M. **AA**   Columbia University. **SR**   Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-08; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG**   11. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE**   D51, C62. **KW**   Exchange Economy. Limited Arbitrage. Competitive Equilibrium.
AB   We establish that an exchange economy with infinitely many commodities or securities has a competitive equilibrium if and only if agents' endowments and preferences satisfy a condition called "limited arbitrage." Limited arbitrage is defined on initial endowments and preferences and bounds (but not by zero) the utility that can be derived from zero-cost transactions. This condition is an extension of the condition of the same name shown by Chichilnisky to be necessary and sufficient for the existence of competitive equilibrium in finite dimensional economies, and also to be equivalent to the existence of social choice rules. This condition is also shown to be sufficient for the closedness of the Pareto frontier.

PD   March 1993. **TI**   Intersecting Families of Sets and the Topology of Cones in Economics. **AA**   Columbia University. **SR**   Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-17; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG**   17. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE**   C62, D51, D71. **KW**   Market Equilibrium. Social Choice Function.
AB   Two classical problems in economics, the existence of a market equilibrium and the existence of social choice functions, are formalized here by the properties of a family of cones associated with the economy. A necessary and sufficient

condition for solving the former is the non-empty intersection of the family of cones, and one such condition for solving the latter is the acyclicity of the unions of its subfamilies. We show an unexpected but clear connection between the two problems by establishing that the two necessary and sufficient conditions are identical. We first prove a duality property of the topology of a family of finitely many open sets in a general topological space: we establish a homeomorphism between the reduced homology of unions and intersections of subfamilies in dimensions complementary to their cardinality. We than establish a necessary and sufficient condition for families of an arbitrary finite number of sets in a general topological space to have a non-empty acyclic intersection: every subfamily must have acyclic union.

PD March 1993. **TI** Who Needs Energy Taxes? **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-18; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 7. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE** H21, H23, Q48, Q41. **KW** Energy Tax. Price Elasticities. Oil Demand.
AB Clinton's broad-based energy tax proposal would tax the energy content of fuel as measured in British thermal units. The implementation of such a tax is complicated by the difference in the long and short run price elasticities of demand for oil: the long run elasticity is more than twice as high as the short. This paper emphasizes that the timing of an energy tax policy must be designed with this difference in mind.

PD April 1993. **TI** On the Existence and the Topology of Equilibria in Incomplete Asset Markets. **AU** Chichilnisky, Graciela; Heal, Geoffrey M. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-20; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 12. **PR** $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE** D52, C62. **KW** Incomplete Markets. Existence of Equilibrium.
AB A brief proof of the existence of an equilibrium in incomplete markets is given using properties of strictly regular economies (Theorem 1). We also establish simple conditions on the parameters of the economy which ensure that it is strictly regular (Lemma 1). Theorem 2 provides a topological characterization of the pseudo-equilibrium manifold omega. This is a covering space of a manifold topologically equivalent to G to the k,n, the space of k planes in R to the n, where k is the number of assets and n the number of states. Therefore omega is generally not contractible. Theorem 3 establishes that the spot equilibrium manifold S consisting of spot prices and asset returns which clear the markets, is topologically equivalent to G to the k,n.

Chick, Victoria
TI Liquidity and Potential Surprise. **AU** dos Anjos, Mocacir, Jr.; Chick, Victoria.

Christensen, Benedicte Vibe
PD September 1993. **TI** The Russian Federation in Transition: External Developments. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/74; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 39. **PR** not available. **JE** F32, F41, P20. **KW** Economic Transition. Balance of Payments. External Debt.
AB This paper discusses Russia's balance of payments developments in recent years: the initial macroeconomic imbalances and systemic shocks which set the stage for the critical balance of payments difficulties Russia faced in the early 1990's; the lessons from the early phases of Russia's economic reforms; the choices faced by the Russian Government and the international community in supporting the government's reform efforts; and the external debt situation. This analysis also points to external adjustment issues which Russia will face in the period ahead, including the potential for an early reversal of the export decline and the nature of external financing and debt problems.

Ciccone, Antonio
PD May 1993. **TI** Start-Up Costs and Pecuniary Externalities as Barriers to Economic Development. **AU** Ciccone, Antonio; Matsuyama, Kiminori. **AA** Ciccone: Stanford University. Matsuyama: Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4363; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** L13, O12. **KW** Specialized Inputs. Monopolistic Competition.
AB One critical aspect of economic development is that productivity growth and a rising standard of living are realized through more roundabout methods of production and increasing specialization of intermediate inputs and producer services. We use an extended version of the Judd-Grossman-Helpman model of dynamic monopolistic competition to show that an economy that inherits a small range of specialized inputs can be trapped into a lower stage of development. The limited availability of specialized inputs forces the final goods producers to use a labor intensive technology, which in turns implies a small inducement to introduce new intermediate products. The start-up costs, which make the intermediate goods producers subject to dynamic increasing returns, and pecuniary externalities that result from the factor substitution in the final goods sector, play essential roles in the model.

Clement E.
PD January 1993. **TI** Models Lineaires a Facteurs et Structure a Terme des Taux D'interet. **AU** Clement E.; Gourieroux, Christian; Monfort, Alain. **AA** Clement: CREST and Universite Paris IX. Gourieroux: CREST and CEPREMAP. Monfort: INSEE. **SR** CEPREMAP Discussion Paper: 9306; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 30. **PR** 25 Francs. **JE** G12. **KW** Factor Model. Term Structure.
AB The aim of this paper is the determination of the term structure of interest rates from observations of the prices of fixed-income bonds. We first introduce factor models to describe the evolution of prices of zero-coupon bonds, and we derive the constraints induced by the arbitrage free condition. The second part of the paper is concerned with the statistical problems: identification, parameter estimation, test of the arbitrage free hypothesis, valuation of various financial assets. This paper is written in French.

Clement, E.

PD February 1993. **TI** Prevision de Mesures de Prix Contingents. **AU** Clement, E.; Gourieroux, Christian; Monfort, Alain. **AA** Clement: CREST and Univerisite Paris IX. Gourieroux: CREST and CEPREMAP. Monfort: INSEE. **SR** CEPREMAP Discussion Paper: 9310; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 37. **PR** 25 Francs. **JE** G13, C51. **KW** State Prices Density. Arbitrage Pricing. Gamma Measures.
AB In this paper we describe an arbitrage pricing model for incomplete markets. The securities are contingent claims, whose cash-flows depend on the values of an underlying index. These securities may be expressed as functions of elementary contingent assets and the approach proposed in this paper consists in interpreting the measure of elementary contingent prices (the so-called state price density) as a random measure. Then we introduce a model for this random measure and we deduce the distribution of observed prices in order to determine from the data the parameters of the model. The computations are completely presented for gamma measures. The interest of the method is essentially to consider the risk-neutral probability as a random measure, which allows us to keep in the pricing formula a part of indeterminacy associated with the incompleteness of the market. This paper is written in French.

PD June 1993. **TI** Prediction of Contingent Price Measures. **AU** Clement, E.; Gourieroux, Christian; Monfort, Alain. **AA** Clement: CREST and Universite de Parix IX. Gourieroux: CREST and CEPREMAP; Monfort: INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9239; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 35. **PR** no charge. **JE** C51, G13. **KW** State Price Density. Arbitrage. Gamma Measures Contingent Claims.
AB In this paper, we describe an arbitrage pricing model for incomplete markets. The securities are contingent claims, whose cash-flows depend on the value of an underlying index. These securities may be expressed as functions of elementary contingent assets and the approach proposed in this paper consists in interpreting the measure of elementary contingent prices (the so-called state price density) as a random measure. Then we introduce a model for this random measure and we deduce the distribution of observed prices in order to determine from the data the parameters of the model. The computations are completely presented for gamma measures. The interest of the method is essentially to consider the risk-neutral probability as a random measure, which allows to keep in the pricing formula a part of indeterminacy associated with the incompleteness of the market.

Clement, Jean

TI Economic Trends in Africa (The Economic Performance of Sub-Saharan African Countries). **AU** Dhonte, Pierre; Clement, Jean; Matungulu, Mbuyamu; Rehm, Dawn.

Cohen, Daniel

PD February 1993. **TI** Growth and External Debt. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9302; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 26. **PR** 25 Francs. **JE** F34, F21. **KW** Debt. Growth. Balance of Payments.
AB The paper surveys the literature on external debt that has been developed over the past decade. The first stage in the literature emphasized the intertemporal nature of a balance of payments. It reflected the view that balance of payments movements were an equilibrium phenomenon reflecting either transitory disturbances or permanent transfers of capital towards the poor countries. The second stage emphasized the risk of debt repudiation and set up the theory of optimal credit ceilings imposed on a sovereign debtor. The third stage analyzed the effect of a "debt overhang" on domestic investment. The last stage analyzed how a sovereign debt could be best reduced.

PD February 1993. **TI** Two Notes on Economic Growth and the Solow Model. **AA** CEPREMAP, ECOLE Normale Superieure, and CEPR. **SR** CEPREMAP Discussion Paper: 9303; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 8. **PR** 25 Francs. **JE** O40, O47. **KW** Growth. Convergence.
AB The two notes deal (from different angles) with the extension of the Solow model that has been offered by Mankiw, Romer and Weil (MRW). In this "extended Solow" model, physical capital enters the production function with the same weight as human capital and both weights are about 1/3. The first note challenges the assumption that the law of motion of human capital is collinear to the law of motion of physical capital, a key assumption which allows MRW to keep a one-dimensional trade of economic growth. The note shows instead that growth appears to be the sum of two terms: one term is the traditional Solow term (which is proportional to the distance between initial and "terminal" value of per-capita income); a second term which I call the "productivity wedge" is shown to be involved and to depend on the human-to-physical capital ratio. The second note verifies that physical capital enters into the production function with a weight of (only) 1/3 but challenges the view that school enrollment is a "causal" determinant of economic growth. In order to do that the note offers to estimate a growth equation in which an idiosyncratic term is controlled for each country.

Coker, David C.

PD October 1992. **TI** Legislative Committees as Loyalty-Generating Institutions. **AU** Coker, David C.; Crain, W. Mark. **AA** George Mason University. **SR** University of Western Ontario Papers in Political Economy: 34; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 26. **PR** no charge. **JE** D72. **KW** Congress. Party Loyalty. Voting Patterns.
AB The current debate over models of self-selection in Congress - whether Congressmen by-and-large find themselves on committees which most closely correspond to their constituents' interests - has implications for theories of Congressional organization. Building on recent findings which question a categorical self-selection process, in this paper we present a theory of committee function based on loyalty to party leaders. As a rationale for leadership privilege, and to provide context for our argument, we first present a theoretical framework based on a modified model of cooperation. We then focus on certain specifics of our leadership theory; that rank-and-file members vote leadership interests in exchange for leader support in gaining choice committee assignments and aid in passing legislation. This leads to predictions about voting patterns across committees. Static tests of these relations are performed, as well as those incorporating changes in voting patterns with seniority.

Coleman, John
TI Identifying Monetary Policy With a Model of the Federal Funds Rate. **AU** Gilles, Christian; Coleman, John; Labadie, Pamela.

Conley, John P.
TI On Resolving the One-Shot Prisoners' Dilemma Through Probabilistic Cheap Talk. **AU** Chakravorti, Bhaskar; Conley, John P.; Taub, Bart.

TI Economic Applications of Probabilistic Cheap Talk. **AU** Chakravorti, Bhaskar; Conley, John P.; Taub, Bart.

TI Cheap Play with No Regret. **AU** Chakravorti, Bhaskar; Conley, John P.

TI Bargaining, Efficiency and the Repeated Prisoners' Dilemma. **AU** Chakravorti, Bhaskar; Conley, John P.

Corbett, Charles J.
PD March 1993. **TI** Budget Allocation Policies for Site Decontamination: A Mathematical Programming Approach. **AU** Corbett, Charles J.; Debets, Frank J. C.; Van Wassenhove, Luk N. **AA** INSEAD. **SR** INSEAD Working Papers: 93/25/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 21. **PR** not available. **JE** C61, Q28, H77. **KW** Environmental Cleanup. Budget Allocation.
AB A major problem currently confronting central governments is how to optimally allocate resources for decontamination of polluted sites. "Optimally" here refers to obtaining maximum environmental benefits with the limited resources available. An important issue in budget allocation is that of centralization/decentralization. This paper investigates the use of mathematical programming models to support allocation procedures to obtain maximum environmental effectiveness and economic efficiency. We consider the situation where regional authorities provide limited, summary information to the central government, which then allocates budgets. The central government aims to maximize total environmental benefits, subject to a central budget constraint (and constraints on other resources). The problem can be formulated as a mixed integer programming problem, but the size of the problem precludes the search for optimal solutions. We present an effective heuristic and include computational results on its performance.

PD June 1993. **TI** The Green Fee. **AU** Corbett, Charles J.; Van Wassenhove, Luk N. **AA** INSEAD. **SR** INSEAD Working Papers: 93/47/TM/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 19. **PR** not available. **JE** M11, M14, Q20, Q30. **KW** Operationalization. Environmental Issues.
AB Two of the major challenges facing business in its dealings with respect to environmental issues are internalization and operationalization. Appropriate internalization is needed to ensure that the company's responses to environmental issues are consistent with its responses to other issues and with its long-term goals. To each environmental issue, different levels of response are possible; in this paper we suggest a framework which, without providing any ready answers, may aid managers in structuring these responses. However, internalization only refers to intentions, and, as such, is not sufficient. To be effective, environmental intentions need to be operationalized, to become integrated into a firm's daily operations. Again without providing any specific guidelines, we suggest that operationalization of environmental programs can be facilitated by exploring and exploiting analogies with existing and proven programs already in place in many firms.

Corchon, Luis C.
TI Credible Implementation. **AU** Chakravorti, Bhaskar; Wilkie, Simon; Corchon, Luis C.

Cothren, Richard
PD February 1993. **TI** Dynamic Incentive Contracts with Intertemporal Demand Substitution. **AU** Cothren, Richard; Parigi, Bruno M. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E93-04; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** not available. **PR** no charge. **JE** D82, L14. **KW** Asymmetric Information. Agency Model.
AB We analyze dynamic incentive contracts under asymmetric information about agents' characteristics. We extend the analysis of Laffont and Tirole to the case in which the principal has the ability to shift both demand and production across periods to minimize the informational rents paid to the agent. This is possible when the principal's objective function allows intertemporal demand substitution. We show that postponement and anticipation of demand work as commitment devices for the principal. We characterize the separating and pooling equilibria of the optimal two period contracts.

Crabbe, Leland
PD July 1993. **TI** Alternative Tests of Agency Theories of Callable Corporate Bonds. **AU** Crabbe, Leland; Helwege, Jean. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-26; C/O Simon G. Gilchrist, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 25. **PR** no charge. **JE** G32. **KW** Callable. Agency Theory. Bonds.
AB According to agency theories, the prevalence of callable bonds arises from asymmetric information, a risk incentive problem, or an underinvestment problem. These theories are difficult to distinguish empirically because there are no direct measures of agency costs. Previous studies have found support for agency theories as a group, focusing on whether a bond has a call provision. In our research, we examine several areas in which the various theories are distinguishable: The subsequent rating changes of the bonds; the value of the call option; the period of call protection; the call features of bonds issued in LBO's and the investment activity of bond issuers. Based on a sample of 958 industrial straight bonds issued between 1987 and 1991, the results of our alternative tests are at variance with the asymmetric information or risk incentive theories, but the findings provide weak support for the underinvestment theory.

Cragg, John G.
PD August 1993. **TI** On the Asymptotic Properties of LDU-Based Tests of the Rank of a Matrix. **AU** Cragg, John G.; Donald, Stephen G. **AA** Cragg: University of British Columbia. Donald: University of Florida. **SR** University of British Columbia Department of Economics Discussion Paper:

93-28; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 25. **PR** JE C10. **KW** LDU Decomposition. SGLS Tests.
AB Gill and Lewbel (1992) recently introduced a test for the rank of a matrix based on the LDU decomposition. Unfortunately, the asymptotic distribution suggested by them is incorrect except in a very limited problem and in general the asymptotic distribution is that of a highly complicated nonlinear function of a normally distributed random vector. A simulation indicates that the difference from the suggested asymptotic distribution can be extreme. The LDU decomposition can, however, be used to produce a valid test asymptotically equivalent to the SGLS test.

Crain, W. Mark
TI Legislative Committees as Loyalty-Generating Institutions. **AU** Coker, David C.; Crain, W. Mark.

Croushore, Dean
PD May 1993. **TI** Ricardian Equivalence with Wage-Rate Uncertainty. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 93-14; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 19. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. **JE** H24, H23, J22. **KW** Distortionary Taxes. Labor Supply.
AB This paper examines Ricardian equivalence when the wage rate is uncertain and people choose their labor supply. We review the model of Barsky, Mankiw, and Zeldes (AER 1986) and show that its results concerning Ricardian equivalence can be interpreted in a manner that has nothing to do with the timing of deficits. Instead, their finding of a positive marginal propensity to consume out of a tax cut is really due to the insurance aspect of distortionary taxation. Then we explore the trade-off between this insurance aspect and labor-supply distortions in the context of a model similar to that of Barsky, Mankiw, and Zeldes, but incorporating labor supply. The optimal value of the labor income-tax rate depends on the variance of income, risk parameters, and the disutility of labor. Ricardian equivalence does not hold for certain tax changes. Using simulation methods we find that, in our benchmark cases, the marginal propensity to consume from a tax cut is generally negative when the labor-income tax rate is set at its optimal value.

Currie, Janet
PD July 1993. **TI** Does Head Start Make a Difference? **AU** Currie, Janet; Thomas, Duncan. **AA** Currie: National Bureau of Economic Research and MIT. Thomas: Yale University. **SR** National Bureau of Economic Research Working Paper: 4406; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** $5.00. **JE** I20, I21. **KW** Education. Head Start.
AB Although there is broad bi-partisan support for Head Start, the evidence of positive long-term effects of the program is not overwhelming. Using data from the National Longitudinal Survey's Child-Mother file, we examine the impact of the program on a range of child outcomes. We compare non-parametric estimates of program effects with estimates from parametric models that control for selection by including mother fixed effects. This comparison suggest that studies that ignore selection can be substantially misleading; it also suggests that the impact of selection differs considerably across racial and ethnic groups. After controlling for selection, we find positive and persistent effects of participation in Head Start on test scores of white and Hispanic children. These children are also less likely to have repeated a grade. We find no effect on the test scores or schooling attainment of African-American children. White children who attend Head Start are more likely to receive a measles shot, while African-American enrollees receive measles shots at an earlier age. African-American children who attend Head Start are also taller than their siblings. In a sample of the children's mothers, we find evidence whites who attended Head Start as children are taller and have higher AFQT scores than their siblings who did not.

Dawar, Niraj
PD December 1992. **TI** A Cross-Cultural Study of Interpersonal Information Seeking and Giving Behavior. **AU** Dawar, Niraj; Parker, Philip; Price, Lydia J. **AA** INSEAD. **SR** INSEAD Working Papers: 93/01/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 21. **PR** not available. **JE** D12, D83. **KW** Brand Choice. Marketing. International Comparisons.
AB Research conducted primarily in the United States has shown that interpersonal influences are more important than most other factors in consumers' product adoption and brand choice decisions. Is the level of information giving and seeking behavior dependent on culture? In a study representing over 35 nationalities, we examine the the importance of interpersonal influences across cultures. Consistent with arguments which favor the globalization of marketing efforts, our study indicates that individual factors (information search behavior, risk aversion, and category interest) better explain differences in interpersonal information seeking and giving than one's culture or country of origin.

PD July 1993. **TI** Extendability of Umbrella Brands. **AA** INSEAD. **SR** INSEAD Working Papers: 93/48/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 14. **PR** not available. **JE** M30, m37, O10. **KW** Product Brands. Brand Extensions.
AB For single product brands, consumers evaluate the "fit" of brand extensions in relation to the existing product. For umbrella brands, the question of product association as a determinant of brand extendibility is more complex. With which of the existing products are extension products compared in order to arrive at judgments of "fit"? This paper introduces a distinction between context-dependent and context-independent brands. This distinction is used to explore the possibility that the product associations that some umbrella brands evoke may vary as a function of the context in which the brand is activated. Results from an experiment show that context-dependent activation influences consumers evaluations of brand extensions. The extendibility of a brand depends upon its level of contest-dependency. Further, it is found that extensions that are close to products that dominate within a brand depends on its level of context-dependence. Further, it is found that extensions that are close to products that dominate within a brand are evaluated in terms of the attitude toward the dominant product, while extensions close to nondominant products are evaluated as function of the activation of the nondominant product.

De Gregorio, Jose

PD September 1993. **TI** Credit Markets and Stagnation in an Endogenous Growth Model. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/93/13; International Monetary Fund, Washington, DC 20431. **PG** 14. **PR** not available. **JE** O41, E21, O16. **KW** Liquidity Constraints. Economic Growth. Human Capital.
AB This paper studies the effects that the inability of individuals to borrow against future income has on economic growth. The model assumes that human capital, which is accumulated through education, is the only factor of production. It is shown that liquidity constraints reduce growth. Further, in the presence of externalities that may induce two equilibria, it is shown that liquidity constraints not only reduce the rate of growth in the high-growth equilibrium, but can also make the low-growth equilibrium more likely to occur.

PD September 1993. **TI** Credit Markets and Stagnation in an Endogenous Growth Model. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/72; International Monetary
Fund, 700 19th Street, Washington, DC 20431. **PG** 14. **PR** not available. **JE** O41, D91, E21, O16. **KW** Liquidity Constraints. Human Capital. Economic Growth.
AB This paper studies the effects that the inability of individuals to borrow against future income has on economic growth. The model assumes that human capital, which is accumulated through education, is the only factor of production. It is shown that liquidity constraints reduce growth. Further, in the presence of externalities that may induce two equilibria, it is shown that liquidity constraints not only reduce the rate of growth in the high-growth equilibrium, but can also make the low-growth equilibrium more likely to occur.

De Meyer, Arnoud

PD December 1992. **TI** Creating the Virtual Factory. **AA** INSEAD. **SR** INSEAD Working Papers: 92/82/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 10. **PR** not available. **JE** L60, L23. **KW** Manufacturing. Integration. Implementation.
AB Since 1984, we have carried out a bi-yearly survey at INSEAD of European Manufacturing and practice. This report provides an overview of the 1992 results. It appears that over the last few years European Manufacturers have implemented the concepts of customer-driven lean manufacturing. These efforts have been translated into concrete results on the manufacturing floor, but have not translated into increased competitiveness of European companies. Faced with such a dissatisfying situation, European manufacturers are searching for a new concept which can be implemented after lean manufacturing. It appears that this new approach may be a virtual factory; i.e. a factory whose organization extends into other functions or into outside partners. The organizational innovations needed for the implementation of this virtual factory are rooted in an upgrading of the human resources, and complemented by an investment in integrating information technology.

Debets, Frank J. C.

TI Budget Allocation Policies for Site Decontamination: A Mathematical Programming Approach. **AU** Corbett, Charles J.; Debets, Frank J. C.; Van Wassenhove, Luk N.

Demange, G.

PD August 1993. **TI** Private Information and the Design of Securities. **AU** Demange, G.; Laroque, G. **AA** Demange: DELTA. Laroque: INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9334; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 27. **PR** no charge. **JE** D82, G14, G32. **KW** Asymmetric Information. Security Design.
AB One often quoted reason for the incompleteness of financial markets is the fact that an informational asymmetry prevents entrepreneurs from floating their company on the market. In fact, the privileged information that the owners have on their firms discourage rational financial investors and thins the market. The paper studies the validity of this argument in a model similar to Grossman-Stiglitz (1980). An entrepreneur who contemplates issuing a new security faces a trade-off between speculative gains, which arise from his privileged information, and an insurance motive, associated with the insurance provided by the stock market. We study the terms of this arbitrage as a function of the fundamentals of the economy: aggregate risk, risk tolerance, precision of the privileged information.

Demery, D.

TI Stochastic Trends and the Business Cycle in the U.K. **AU** Attfield, C. L. F.; Demery, D.; Duck, N. W.

Den Haan, Wouter J.

PD October 1992. **TI** Convergence in Stochastic Models: The Importance of the Share of Capital in GNP in the Presence of Productivity Shocks. **AA** University of California, San Diego. **SR** University of California, San Diego Department of Economics Working Paper: 92-41; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. **PG** 18. **PR** $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. **JE** O40, O47, F43. **KW** Growth Models. Productivity Shocks. Convergence Hypothesis.
AB In this paper we show that the share of capital is not very important for the speed of convergence in the standard growth model in the presence of productivity shocks. In economies with persistent productivity shocks the slow convergence of per capita income observed for U.S. states can be reconciled with stochastic real business cycle models for low as well as high values of the share of capital. If productivity shocks are i.i.d. then the standard growth model cannot explain the slow convergence. This paper is an example of the message of the early rational expectations literature that stochastic processes facing agents are important for identifying structural parameters in econometric studies.

Derks, Jean J. M.

PD July 1993. **TI** Hierarchical Organization Structures and Constraints on Coalition Formation. **AU** Derks, Jean J. M.; Gilles, Robert P. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E93-12; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** not available. **PR** no charge. **JE** C71, L22. **KW** Cooperative Game. Hierarchy. Permission Structure.
AB This paper studies the constraints in coalition formation that result from a hierarchical organization structure on the

class of players in a cooperative game with transferable utilities. If one assumes that the superiors of a certain individual have to give permission to the actions undertaken by that individual, then one arrives at a limited collection of autonomous coalitions. This resulting collection is a lattice of subsets on the player set. We show that if the collection of formable coalitions is limited to a lattice, the core allows for (infinite) exploitation of subordinates. For discerning lattices we are able to generalize the results of Weber (1988), namely the core is a subset of the convex hull of the collection of all attainable marginal contribution vectors plus a fixed cone. This relation is an equality if and only if the game is convex. This extends the results of Shapley (1971) and Ichiishi (1981).

Dermine, Jean

PD February 1993. **TI** Customer Loyalty, Scale Economies and Economies of Scope in French Funds: Additional Evidence. **AU** Dermine, Jean; Roller, Lars Hendrik; Bonanni, Carole. **AA** INSEAD. **SR** INSEAD Working Papers: 93/08/EPS/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 7. **PR** not available. **JE** G29, G20. **KW** Mutual Funds. Product-Age Effect.
AB The paper evaluates the effects of rapid market growth and product-age on economies of scale and scope in the French mutual funds (SICAV) industry. This segment of the financial sector offers some unique characteristics. The first is that some firms specialize while others supply several products. The second is that the French mutual funds industry has grown by 35% from 1987 to 1989. The third is that the age (time since creation) of each mutual fund is known, so that product-age effects can be identified. By using jointly the 1987 and 1989 cross-sectional data sets and the age of each mutual fund, we are able to test the stability of economies of scale and scope estimates reported in a previous study.

PD June 1993. **TI** The Evaluation of Interest Rate Risk, Some Warnings About the Basle Proposal. **AA** INSEAD. **SR** INSEAD Working Papers: 93/40/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 11. **PR** not available. **JE** G21, G28. **KW** Banks. Banking Regulation.
AB The Basle Committee on Banking Supervision and the Federal Reserve have recently published papers on the measurement of bank's exposure to interest rate risk. The purpose of the paper is to warn that these proposals address one source of interest rate risk only. Senior bank managers and board of directors must design multiple (vector-type) indicators to capture the various sources of interest rate risk.

Devereux, Michael B.

PD September 1993. **TI** Provincial Budget Deficits and the Debt Crisis in Canada. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: E93-30; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** not available. **PR** **JE** H72, H74, E62. **KW** Provincial Debt. Debt Crisis. Borrowing Power.
AB This essay discusses some of the economic issues that are involved in the recent budgetary crises of the Canadian provinces. An overview of the recent experience with provincial debt and deficits is first presented. This is followed by a discussion of the general principles behind the

decentralization of borrowing powers within a confederation. Finally, the essay addresses the likelihood of major alternative scenarios concerning the outcomes of the provincial debt crisis.

TI Monopolistic Competition, Price Setting, and the Effects of Real and Monetary Shocks. **AU** Beaudry, Paul; Devereux, Michael B.

Dhonte, Pierre

PD September 1993. **TI** Economic Trends in Africa (The Economic Performance of Sub-Saharan African Countries). **AU** Dhonte, Pierre; Clement, Jean; Matungulu, Mbuyamu; Rehm, Dawn. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/71; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 14. **PR** not available. **JE** O55, O47. **KW** Output Growth. Credit Markets. Macroeconomic Performance.
AB This paper surveys recent economic developments in countries in the African Department. In the aggregate, output growth continues to be sluggish, and it is expected that half of the countries will experience a declining income per capita in 1993. However, structural adjustment is making fast progress, especially as regards the liberalization of exchange and credit markets. This bodes well for an eventual improvement in economic performance.

Diamantaras, Dimitrios

PD November 1992. **TI** Efficiency in an Economy with One Public Project. **AU** Diamantaras, Dimitrios; Gilles, Robert P. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E92-29; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** not available. **PR** no charge. **JE** D71, D50, D61. **KW** Public Project. Pareto Efficiency. Cost Sharing.
AB In this paper we develop a model in which a public project is identified with a coalition of agents that can undertake it. The cost of the project is left exogenous. We prove several basic results about this model: the existence of individually rational and Pareto efficient allocations, and counterparts of the two welfare theorems based on the notion of valuation equilibrium due to Mas-Colell (1980). Furthermore, we show that the core may be empty, that cost-share equilibria are in the core, and that the core is not equivalent to the set of cost share equilibria.

PD May 1993. **TI** Efficiency in Economies with One Public Project. **AU** Diamantaras, Dimitrios; Gilles, Robert P. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E93-09; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** not available. **PR** no charge. **JE** D50, D61, H40. **KW** Public Project. Pareto Efficiency. Core.
AB We develop a model in which a public project is identified with a coalition of agents that can undertake it. The cost of the project is exogenous. We prove the existence of individually rational and Pareto efficient allocations and counterparts of the two welfare theorems based on the notion of valuation equilibrium due to Mas-Colell (1980). Furthermore, we show that the core may be empty, that cost share equilibria

are in the core, but that the core is not equivalent to the set of cost share equilibria.

Diamantrias, Dimitrios
TI On the Set of Pareto Efficient Allocations in an Economy with Public Goods. AU Wilkie, Simon; Diamantrias, Dimitrios.

Dicks-Mireaux, Louis
PD September 1993. TI Real Wage Adjustment in the Former Soviet Union. AA International Monetary Fund. SR International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/93/11; International Monetary Fund, Washington, DC 20431. PG 21. PR not available. JE E24, E64. KW Wage Targets. Real Wages. Economic Transition.
AB Since 1991, the economies of the former Soviet Union have experienced sizeable shocks that have pushed equilibrium real wages far from pretransition levels. This paper sets out a framework in which to assess the degree of real wage adjustment needed to restore equilibrium, and discusses practical problems in applying wage targets and monitoring real wage developments. A key policy conclusion is that because the accuracy of real wage targets is inevitably suspect, observable indicators should be identified to evaluate the adequacy of actual movements in real wages and of the wage targets; rigid indexation rules should be avoided in nominal incomes policies.

Dickson, Joel M.
PD July 1993. TI Ranking Mutual Funds on an After-Tax Basis. AU Dickson, Joel M.; Shoven, John B. AA Dickson: Stanford University. Shoven: Stanford University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4393; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR no charge. JE G10, G20, G23, G25. KW Mutual Funds. Tax Considerations.
AB This paper takes shareholder level taxes into account in determining the performance of growth and growth and income mutual funds over the 1963-1992 period. It ranks a sample of funds on a before and after-tax basis for investors in different income classes facing various investment horizons. The differences between the relative ranking of funds on a before and after-tax basis are dramatic, especially for middle and high income investors. For instance, on fund which ranks in the 19th percentile on a pre-tax basis ranks in the 61st percentile for an upper income, taxable investor.

Dijkstra, Matthijs C.
TI Planning KLM's Aircraft Maintenance Personnel. AU Van Wassenhove, Luk N.; Van Nunen, J.; Dijkstra, Matthijs C.; Kroon, Leo G.; Salomon, Marc.

Dnes, Antony W.
PD May 1992. TI "Unfair" Contractual Practices and Hostages in Franchise Contracts. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-11; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE L22, D82, L14.

KW Agency Model. Franchises. Incentive Compatibility.
AB Observations of franchising systems are used to construct an agency model of franchising. This combines incentive compatibility and screening properties. A simple statistical test is successfully applied to the predictions of the model.

PD May 1992. TI A Case-Study Analysis of Franchise Contracts. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-12; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE L14, L22. KW Franchises. Incentive Compatibility. Specific Investment.
AB Observations of franchising systems are used in a relational- contracting approach to understanding franchise contracts. Key findings are that contracts evolve over time to incorporate the changing details of time and place, that fee schedules create incentive compatibility, and that specific investments can be identified.

PD May 1992. TI Bidding for Commercial Broadcasting. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-13; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE L82, D44, D60. KW Broadcasting Franchise. Auctions.
AB A model is constructed to demonstrate the adverse welfare consequences of auctioning broadcasting franchises to the highest bidder. An alternative system, of auctioning to the lowest-pricing operator, following the analyses of Chadwick and Demsetz, is shown as preferable but also as requiring tax-subsidy intervention.

PD May 1992. TI Capital Punishment and Murder: The Rich-Society Effect. AU Dnes, Antony W.; Nuxoll, Daniel A. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-14; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE K42. KW Death Penalty.
AB A private-interest model of the selection of capital punishment is developed that predicts lesser use of the death penalty for murder in richer societies. Econometric testing using data from the United States supports the predictions of this model.

Doms, Mark E.
PD July 1993. TI Energy Intensity, Electricity Consumption, and Advanced Manufacturing Technology Usage. AU Doms, Mark E.; Dunne, Timothy. AA Doms: U.S. Bureau of the Census. Dunne: University of Oklahoma and U.S. Bureau of the Census. SR Bureau of the Census Center for Economic Studies Discussion Paper: CES 93-9; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. PG 16. PR no charge. JE C81, L60, Q40. KW Energy Intensity. Technology.
AB This paper reports on the relationship between the usage of advanced manufacturing technologies (AMT's) and energy consumption patterns in manufacturing plants. Using data from the survey of Manufacturing Technology and the 1987 Census of Manufacturers, we model the energy intensity and the

electricity intensity of plants as functions of AMT usage and plant age. The main findings are that plants not using AMTs but consume proportionately more electricity as a fuel source. Additionally older plants are generally more energy intensive and rely on fossil fuels to a greater extent than younger plants.

Donald, Stephen G.

TI   On the Asymptotic Properties of LDU-Based Tests of the Rank of a Matrix. AU   Cragg, John G.; Donald, Stephen G.

Donaldson, David

TI   Multi-Valued Demand and Rational Choice in the Two-Commodity Case. AU   Blackorby, Charles; Bossert, Walter; Donaldson, David.

dos Anjos, Mocacir, Jr

PD   April 1993. TI   Liquidity and Potential Surprise. AU   dos   Anjos,   Mocacir,   Jr.;   Chick,   Victoria. AA   University College, London. SR   University College London Discussion Paper: 93-04; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG   47. PR   3 pounds; checks payable to Dept.   of   Economics,   UCL.   JE   B31,   B41,   E40. KW   Liquidity. Shackle. Expectations.
AB   Liquidity remains as slippery a concept as its name suggests. Despite many attempts to arrive at some description of how an agent in an environment of uncertainty might act to assess liquidity, it is our view that more can still be said. In particular, it is now conventional to bring the classical theory of probability to bear on this question, but this approach has well-known difficulties. In particular, it assumes stability in the underlying environment, precisely the conditions in which the need for liquidity is at a minimum. By contrast, the experience of Brazil in the late 1980's brings radical uncertainty into the assessment of liquidity. Accordingly, we explore G.L.S. Shackle's twin concepts of potential surprise and focus gain and loss as a framework for evaluating liquidity. We conclude that Shackle's method is more general, allowing a unified treatment of the whole spectrum of liquidity.

Doz, Yves L.

TI   Business   Navigator: The   Next   Generation   of Management Development Tools. AU   Angehrn, Albert A.; Doz, Yves L.; Atherton, Jill E. M.

Duck, N. W.

TI   Stochastic Trends and the Business Cycle in the U.K. AU   Attfield, C. L. F.; Demery, D.; Duck, N. W.

Dunne, Paul

PD   September 1992. TI   The Changing Structure of Competitive Industry in the 1980's. AU   Dunne, Paul; Hughes, Alan. AA   Dunne: University of Leeds. Hughes: University of Cambridge. SR   University of Cambridge Small Business Research Centre Working Papers: 25; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, UNITED KINGDOM. PG   39. PR $10.00 (L5.00); checks payable to University of Cambridge. JE   L11, D92. KW   Size Distribution. Small Firms. European Industry.
AB   This paper examines changes in the share of large and small firms in the U.K. Developments in the U.K. are compared with those in France, Germany and Italy. The international

comparison shows that the U.K. trends described are part of a general upward drift since the 1970's in the share of small enterprises and establishments in the European economies. In terms of enterprise activity, the U.K. lagged only behind Italy. Nevertheless, in the mid 1980's, even though the U.K. had a relatively high proportion of enterprises in the 20-99 size category, it lagged behind the major European economies in terms of the share of activity for which they accounted. It appears that the share of activity accounted for by large enterprises remains highest in the U.K.

Dunne, Timothy

TI   Energy   Intensity,   Electricity   Consumption,   and Advanced Manufacturing Technology Usage. AU   Doms, Mark E.; Dunne, Timothy.

Dutta, Soumitra

PD   not   available.   TI   Fuzzy   Logic   Applications: Technological   and   Strategic   Issues.   AA   INSEAD. SR   INSEAD   Working   Papers: 93/05/TM;   INSEAD, Boulevard   de   Constance,   Fontainebleau,   77305   Cedex, FRANCE.   PG   36.   PR   not   available.   JE   O33. KW   Technology Adoption. Fuzzy Logic.
AB   Fuzzy logic was invented about 25 years ago. The past few   years   have   seen   an   extra-ordinary   spurt   in   the commercialization of the technology. Not only has fuzzy logic significantly   enhanced   knowledge-base/expert   system technology, it has fundmentally altered the granularity of intelligence. With the help of fuzzy logic, manufacturers of home   appliances   are   today   embedding   intelligence   inside individual products. The application of fuzzy logic has also transformed industrial process control and enabled new product development strategies. Oddly enough, though theoretical developments in fuzzy logic have largely occurred in America and Europe, Japanese companies have spearheaded the commercialization of the technology. Aimed at an audience of business/industrial managers, this paper reviews the evolution of fuzzy logic technology and analyzes the strategic business impact of the technology.

Eckel, Catherine C.

PD   August 1992. TI   The Price of Fairness: Gender Differences in Punishment Games. AU   Eckel, Catherine C.; Grossman, Philip. AA   Virginia Polytechnic Institute and State University. SR   Virginia Polytechnic Institute and State University Working Paper in Economics: E92-22; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG   not available. PR   no charge. JE   D63, D12, J16, C72. KW   Fairness. Punishment Game.
AB   Ideas of fairness influence economic transitions. Men and women may differ systematically in the nature and extent of this influence. In this paper we investigate gender differences in the impact of fairness on the outcome of economic transitions. Our vehicle is a simple "punishment game" where subjects may choose to split a larger pie with a "bad" partner, or a smaller pie with a "good" partner. We find that men are more likely to make decisions on principle, where as women are more responsive to changes in the parameters of the decision-making environment. A higher price for fairness reduces its effect on the outcome of the transaction.

PD   August   1992.   TI   Chivalry   and   Solidarity   in Ultimatum Games. AU   Eckel, Catherine C.; Grossman,

Philip AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-23; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE J16, C72, D63, D12. KW Gender Differences. Equity. Psychology.
AB We investigate differences in the behavior of men and women in ultimatum game experiments. Research in social psychology and sociology suggests that economist's "economic man" model of human behavior may be more appropriate for men than women. Women are thought to be more generous, fair, cooperative, and altruistic than the economic man model implies. We test this proposition in a simple, repeated ultimatum game where subjects are matched with their partners of the same gender, other gender, or unknown gender. We find that although women are slightly more generous than men overall, significant behavioral differences depend more on the matching than on the gender of the subject per se. Both men and women are more generous in their proposals to men than to women, with proposals to unknown partners generally falling in between. Men also are more likely to reject unequal proposals than women. For all groups at all proposal amounts, proposals from women are far less likely to be rejected than proposals from men, and women almost never reject their own proposals.

AB The privatization of state-owned enterprise is often justified by the belief that gains in efficiency will be realized by placing the firm under the discipline of the private market. In order to measure the success of privatization programs, most studies have relied on accounting data to measure firm-specific changes due to the privatization event itself. While this approach has provided significant results, this paper analyzes the effect to the announcement of privatization on the stock prices of the firm's competitors. We analyze intra-industry market reaction to the privatization of two airlines, British Airways and Air Canada, operating in markets which overlap with markets served by U.S. airlines. Our result that privatization hurts competitors is consistent with the prediction that the change in ownership of state-owned firms will improve economic efficiency.

Eckel, Doug

Eckstein, Zvi

AB In this paper we consider alternative methods for estimating models where the data on past endogenous variables include a retrospective bias. We focus on discrete choice models where the report is clearly true or false with respect to the decision variable. For example, in voting models, individuals report on their voting action at a given time, is either true or false. We analyze several ways to handle the retrospective bias. The first and second ways amount to ignoring the problem so that the parameters are estimated with bias. The third way is to integrate out the data that is reported with bias. This method provides consistent estimates, but it does not use all the available information on the main variable in the study. We present our preferred method which is based on a descriptive model for the reporting behavior which enable us to relate the observed data to the true actions. We find, in a particular data, that 80% of the individuals correctly report their past voting decision.

Edwards, Franklin

AB In the 1980's investors poured money into commodity futures in search of higher returns. A primary vehicle for these funds has been commodity funds. These funds are similar to mutual funds except that, instead of holding portfolios of stocks and bonds, they hold portfolios of futures contracts. Commodity funds hold a wide variety of futures contracts, from futures on agricultural and energy products (such as soybeans and crude oil) to futures on U.S. T-bonds and stock indexes. The rapid growth of commodity funds raises the question of which kinds of investors buy these funds. In general, most investors have found trading futures on their own to require too much sophistication and attention, and to be too risky. By buying commodity funds, presumably, investors believe they can overcome these obstacles. The objective of this paper is to analyze the potential returns to an investment in public commodity funds in order to determine under what conditions an investor can benefit from such an investment.

Eichengreen, Barry

AB This paper undertakes a systematic study of the exchange rate crisis which led to a partial dismembering of the EMS in the Fall of 1992. A review of possible interpretations of the crisis concludes that the EMS is now fundamentally unstable, partly because exchange controls have been banned by the

Philip AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-23; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE J16, C72, D63, D12. KW Gender Differences. Equity. Psychology.
AB We investigate differences in the behavior of men and women in ultimatum game experiments. Research in social psychology and sociology suggests that economist's "economic man" model of human behavior may be more appropriate for men than women. Women are thought to be more generous, fair, cooperative, and altruistic than the economic man model implies. We test this proposition in a simple, repeated ultimatum game where subjects are matched with their partners of the same gender, other gender, or unknown gender. We find that although women are slightly more generous than men overall, significant behavioral differences depend more on the matching than on the gender of the subject per se. Both men and women are more generous in their proposals to men than to women, with proposals to unknown partners generally falling in between. Men also are more likely to reject unequal proposals than women. For all groups at all proposal amounts, proposals from women are far less likely to be rejected than proposals from men, and women almost never reject their own proposals.

PD May 1993. TI Privatization and Competition: The Intra-Industry Effects of the Sale of British Airways and Air Canada. AU Eckel, Catherine C.; Eckel, Doug; Singal, Vijay. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E93-08; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE L93, L33. KW Airline Industry. Market Reaction.
AB The privatization of state-owned enterprise is often justified by the belief that gains in efficiency will be realized by placing the firm under the discipline of the private market. In order to measure the success of privatization programs, most studies have relied on accounting data to measure firm-specific changes due to the privatization event itself. While this approach has provided significant results, this paper analyzes the effect to the announcement of privatization on the stock prices of the firm's competitors. We analyze intra-industry market reaction to the privatization of two airlines, British Airways and Air Canada, operating in markets which overlap with markets served by U.S. airlines. Our result that privatization hurts competitors is consistent with the prediction that the change in ownership of state-owned firms will improve economic efficiency.

Eckel, Doug
TI Privatization and Competition: The Intra-Industry Effects of the Sale of British Airways and Air Canada. AU Eckel, Catherine C.; Eckel, Doug; Singal, Vijay.

Eckstein, Zvi
PD September 1993. TI Correcting for Errors in Retrospective Data. AU Eckstein, Zvi; Shachar, Ron. AA Eckstein: Tel-Aviv University and Boston University. Shashar: Tel-Aviv University and Yale University. SR Tel-Aviv Sackler Institute of Economic Studies Working Paper: 16/93; Department of Economics, Tel-Aviv University, Ramat

Aviv 69978, ISRAEL. PG 14. PR no charge. JE C10, C33, C35. KW Retrospective. Estimation. Likelihood.
AB In this paper we consider alternative methods for estimating models where the data on past endogenous variables include a retrospective bias. We focus on discrete choice models where the report is clearly true or false with respect to the decision variable. For example, in voting models, individuals report on their voting action at a given time, is either true or false. We analyze several ways to handle the retrospective bias. The first and second ways amount to ignoring the problem so that the parameters are estimated with bias. The third way is to integrate out the data that is reported with bias. This method provides consistent estimates, but it does not use all the available information on the main variable in the study. We present our preferred method which is based on a descriptive model for the reporting behavior which enable us to relate the observed data to the true actions. We find, in a particular data, that 80% of the individuals correctly report their past voting decision.

Edwards, Franklin
PD March 1993. TI Commodity Funds as an Investment Asset. AU Edwards, Franklin; Goetzmann, William. AA Columbia University. SR Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-93-19; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. PG 19. PR $5.00 academics and non-profit institutions; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). JE G13, G11. KW Futures Markets. Mutual Funds. Portfolio Choice.
AB In the 1980's investors poured money into commodity futures in search of higher returns. A primary vehicle for these funds has been commodity funds. These funds are similar to mutual funds except that, instead of holding portfolios of stocks and bonds, they hold portfolios of futures contracts. Commodity funds hold a wide variety of futures contracts, from futures on agricultural and energy products (such as soybeans and crude oil) to futures on U.S. T-bonds and stock indexes. The rapid growth of commodity funds raises the question of which kinds of investors buy these funds. In general, most investors have found trading futures on their own to require too much sophistication and attention, and to be too risky. By buying commodity funds, presumably, investors believe they can overcome these obstacles. The objective of this paper is to analyze the potential returns to an investment in public commodity funds in order to determine under what conditions an investor can benefit from such an investment.

Eichengreen, Barry
PD April 1993. TI The Unstable EMS. AU Eichengreen, Barry; Wyplosz, Charles. AA Eichengreen: University of California, Berkeley. Wyplosz: INSEAD. SR INSEAD Working Papers: 93/38/EPS; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 77. PR not available. JE F31, F33, E65, F32. KW Exchange Rates. European Monetary System. Stability.
AB This paper undertakes a systematic study of the exchange rate crisis which led to a partial dismembering of the EMS in the Fall of 1992. A review of possible interpretations of the crisis concludes that the EMS is now fundamentally unstable, partly because exchange controls have been banned by the

Single Act and partly because the Maastricht Treaty creates perverse incentives for self-fulfilling attacks. A review of possible options suggests that "business as usual" is not viable. We conclude that some restrictions on short-term capital movements, such as requiring all institutions taking open positions in foreign exchange to make non-interest-bearing deposits with their central bank, represent the best option for successfully traversing the treacherous Stage II.

AB The international monetary system has passed through a succession of phases characterized alternatively by the dominance of fixed and flexible exchange rates. How are these repeated shifts between fixed and flexible rate regimes to be understood? The present paper specifies and tests six hypotheses with the capacity to explain the alternating phases of fixed and flexible exchange rates into which the last century can be partitioned. The evidence provides support for a number of the hypotheses considered. In this sense it confirms that monocausal explanations are unlikely to provide an adequate account of the endogeneity of exchange rate regimes.

AB The history of international monetary arrangements provides no simple recipe for reform. Since 1945 the international momentary system has evolved unevenly in response to changing external conditions and its own internal dynamics. As Schwartz (1993) emphasizes, no single analytical model can capture the essential characteristics of all the phases through which the system has passed. Yet from an historical vantage point, certain common attributes of satisfactory international monetary arrangements stand out. All such arrangements share three characteristics: the capacity to undertake price adjustments, adherence by the participants to robust monetary rules, and ability to contain market pressures. Fragile and poorly functioning international monetary arrangements, in contrast, have lacked one or more of these features. This paper is organized around these three desiderata. Following a brief review of postwar international monetary history, its second section explains what these three necessary conditions for international monetary stability mean. Its third section then uses them as a basis for analyzing the functioning of alternative international monetary arrangements. The paper concludes with some reflections on international monetary reform.

AB Europeans, including economists, are of the same two minds. Ask some and they will profess anxiety about the number of Eastern Europeans with facility in a Western European language who need only cross one western border to raise their wages by a factor of 10 or two borders to raise them by a factor of 100. Ask others and they will insist that Europe is different from North America: that lower levels of labor mobility and higher degrees of regulation and surveillance of employment relationships limit the opportunities and dilute the incentives of Western Europe's neighbors to move. Between these two extremes lies reality. There one can find a body of evidence about migration and labor-market experience that provides a basis for thinking about Europe's migration prospects. It suggests a set of observations -- some widely accepted but others controversial -- with which any analysis of prospective European migration pressures must come to grips. These observations point to a pair of central conclusions. First, there exists a very large stock of potential economic immigrants to Western Europe. The EC can realistically do little if anything to keep them out if they want to come. What it can do is to enhance their incentive to stay home by helping to foster economic growth in the sending regions. Second, Europeans typically view internal and external labor mobility as at odds with one another. Removing Europe's internal barriers to labor mobility is only feasible, it is argued, if at the same time external barriers are strengthened. Otherwise immigrants from outside the EC will enter through the member state whose policies toward migration are least rigorously enforced and disperse throughout the Community.

Eistert, Torsten

Elliehausen, Gregory E.

AB This paper presents new evidence on small businesses' motives for using trade credit based on data from the National Survey of Small Business Finances, a nationally representative survey of firms with fewer than 500 employees. The survey gathered information on the trade credit use and payment practices of a large segment of the business population not covered by most sources of financial data on businesses. We developed a model of demand incorporating the transaction and financing motives and, using the model, analyzed small businesses' decisions about using trade credit at all, making late payments on trade credit, and the amount of trade credit to use. The results of our analysis, which support the existence of both a transaction and a financing motive, provide insights on the substitutability of trade credit and institutional credit and on the relative importance of the two motives in the use of trade credit

by small businesses.

Enger, Thomas P.

AB While the world petroleum market has been intensively analyzed, the economic and financial implications of the international market for natural gas have received less attention. However, the role of gas is rising rapidly. The volume of gas reserves now rivals that of oil, and gas supplies are increasing at a faster rate than oil discoveries. World consumption of natural gas is growing because of concern about the environment, technological change in the electric power industry, and government energy policies. This paper analyzes developments in supply, demand, and prices in the world natural gas market in a medium-term framework, and assesses the longer term macroeconomic and financial implications of this market.

Engle, Robert F.

AB In this paper, we develop a statistical unobserved component model for stock market volatility. The volatility, which is measured by the conditional variance of the stock return residuals as in the ARCH class models, is decomposed into the permanent and the transitory component to reflect the long-run and the short-run behavior of volatility in the stock market. We argue that the "leverage effect" is mainly a temporary behavior of the stock market and that there is no such asymmetric structure of volatility shocks in the long run. The empirical studies support our argument and thus justify the decomposition of the component model introduced.

AB The main goal of the present project was to develop a number of models to produce very short run forecasts of hourly system loads. Several teams of researchers were invited to participate in a real-time forecasting (labelled as the "shoot-out") using historical data from the Puget Sound Power and Light Company (Puget) which acted as the host utility. This paper presents a comparative evaluation of the forecast performance of the various models as well as the detailed specification of the models developed by Engle, Granger, Ramanathan, and Vahid-Araghi (EGRV) whose study was sponsored by the Electric Power Research Institute (EPRI) and carried out by Quantitative Economic Research Inc. (QUERI).

AB This paper analyzes the degree of short and long run comovement in GDP per-capita of three Latin American countries (Argentina, Brazil and Mexico) using a technique discussed in the newly established common features literature. We find the data to display both short and long run comovement, although the degree of the first is higher than that of the last. We also find permanent shocks to explain most of the variance of GDP per-capita for the region, which suggests that external factors such as foreign investment and external debt may be important in determining the long run prospects for Latin American countries. Finally, we show that imposing short and long run comovement restrictions can dramatically improve forecasting.

Englund, Peter

AB This paper provides an international perspective on the dynamics of housing prices in alternative short-run and long-run settings. It proposes an overlapping-generations model of an open economy, where foreign investment is allowed in all assets, i.e. physical capital, land, and housing. Long-run dynamics are characterized by the usual saddle point property of competitive equilibrium, with the openness of the economy augmenting the number of unstable branches. The paper investigates the possibility of bubbles in housing and land markets, and shows that whereas a bubble on the asset price of land is possible, this is not the case with the asset price of housing. The paper examines the potential consequences of international differences in patterns of residential mobility by studying the short-run dynamics of closed economies where adjustment of housing consumption is subject to transactions costs. Numerical simulations indicate that countries with low residential mobility rates should exhibit higher price volatility.

Erbas, S. Nuri

Fund. **SR** International Monetary Fund Working Paper: WP/93/69; International Monetary
Fund, 700 19th Street, Washington, DC 20431. **PG** 14. **PR** not available. **JE** H24, H26. **KW** Tax Evasion. Economic Stability.
AB Presumptive taxation has been adopted in many countries to tax hard-to-tax activities and reduce evasion. Further, in view of the possible efficiency gains from such techniques, a case can be made for adopting presumptive taxation of global income. This paper addresses two questions. First, could revenue be increased by adopting presumptive tax methods? Second, would presumptive income taxation contribute to macroeconomic instability because it lacks the automatic stabilizer property of standard progressive income taxation? Two simple models suggest that there is scope for increasing revenue under presumptive taxation without necessarily undermining economic stability. The relevance of the first model for presumptive excise taxation in Pakistan is also examined.

Erikson, Robert S.
PD June 1993. **TI** The Spending Game: Money, Votes, and Incumbency in Congressional Elections. **AU** Erikson, Robert S.; Palfrey, Thomas R. **AA** Erikson: University of Houston. Palfrey: California Institute of Technology. **SR** Caltech Social Science Working Paper: 851; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 23. **PR** no charge. **JE** D70, D72. **KW** Elections. Incumbency. Campaign Spending. Congress.
AB This paper takes a game-theoretic approach to the analysis of the spending-votes relationship in Congressional elections to reinvestigate the surprisingly weak effects of incumbent spending measured in previous studies. Rather than focusing narrowly on the impact of spending on electoral outcomes, we attempt to take account of the reciprocal effect of (anticipated) closeness on spending using several statistical approaches. We also offer improvements in the specification and measurement of the vote equation, by using a better measure of district party strength adjusted for year-effects, and by including a variable that measures the heat of the campaign in terms of total spending by the incumbents and challengers. The latter measure partially corrects for the simultaneously determined (and highly positively correlated) levels of incumbent and and challenger spending. A more rigorous multiequation simultaneous equations model, identified by uncorrelated errors, provides even more leverage for sorting out the effects of incumbent and challenger spending on votes. That analysis indicated (in a complete turnaround from findings reported elsewhere) that incumbent spending effects are highly significant and of a magnitude that is, if anything, greater than challenger spending effects. The paper concludes by using a game theoretic model to estimate the effect of anticipated closeness on spending, and to estimate differences in campaign financing costs between incumbents and challengers.

Famulari, Melissa
PD January 1993. **TI** Employer Effects on Earnings and Tenure. **AU** Famulari, Melissa; Bronars, Stephen G. **AA** University of Texas. **SR** Bureau of Labor Statistics Working Paper: 240; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, D.C. 20212. **PG** 31. **PR** no charge. **JE** J31. **KW** Earnings. Tenure. Employer Fixed Effects.
AB We use a unique cross section data set, derived from a Bureau of Labor Statistics pilot establishment survey that collected worker demographic data, to examine the employer-specific components of earnings and tenure variation across workers. Because these data have multiple observations per employer, we are able to compare within-employer and across-employer estimated returns to worker characteristics in earnings and tenure regressions. In addition, for a subsample of employers who reported the workers' starting monthly wage, we examine the empirical relationships between initial earnings, current earnings, and job tenure. For this sample of full time, white collar workers, we find (1) worker characteristics explain far more of the variation in establishment-reported earnings than household-reported earnings, (2) while establishment fixed effects are substantial and significant, worker characteristics explain almost twice as much of the variation in monthly wages, (3) establishment effects in both earnings and tenure regressions are correlated with worker characteristics, particularly education and experience, and (4) over half of the conditional covariance between current earnings and tenure is attributable to within-establishment variation. Finally we find strong evidence that, conditional on worker characteristics job tenure is significantly related to earnings growth, both within and across employers.

Farber, Henry S.
PD May 1993. **TI** A Comparison of Formal and Informal Dispute Resolution in Medical Malpractice. **AU** Farber, Henry S.; White Michelle. **AA** Farber: Princeton University and National Bureau of Economic Research. White: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 4371; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** $5.00. **JE** I11, D82, K41. **KW** Complaint Process. Litigation. Settlements.
AB In this study we examine the experience of a single large hospital with an informal prelitigation "complaint" process that resolves some cases outside of the legal system. The empirical results are generally consistent with an information structure where patients are poorly informed about the quality of medical care and the hospital does not know whether particular patients are litigious or not. The complaint process seems to resolve many complaints in a less costly manner than filing lawsuits. Almost half of all complaints are resolved before a lawsuit is filed. The large majority of these are dropped, and they are cases that would likely have been dropped even if they had been initiated as lawsuits. Very few cases are settled with a cash payment to patients before a lawsuit is filed, suggesting that patients must file lawsuits in order to convince the hospital that they are litigious enough to justify a settlement. We conclude that the complaint process is a cost-effective "front-end" for the litigation process that provides information to patients regarding the quality of their medical care.

Faust, Jon
PD July 1993. **TI** Near Observational Equivalence and Unit Root Processes: Formal Concepts and Implications. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance and Economics Discussion Paper: 447; Division of International Finance, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 17. **PR** no

charge. **JE** C22. **KW** Observational Equivalence. Unit Root. Stationarity.

AB A number of recent papers have discussed the fact that difference stationary and trend stationary processes are nearly observationally equivalent. The meaning of this fact, however, remains clouded. This paper defines near observational equivalence and derives several implications of the notion for classical and Bayesian unit root inference. For example, unless restrictions are imposed on the general difference and trend stationary models, the exact size of any consistent unit root test rises to one with sample size. Bayesian posteriors regarding unit roots are arbitrary in the sense that given any prior, there are other priors that agree with the first regarding empirical outcomes, but that imply arbitrarily different unit root posteriors.

Feenstra, Robert C.

PD July 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 and National Bureau of Economic Research. Gagnon: Board of Governors of the Federal Reserve System. Knetter: Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4399; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** $5.00. **JE** F10, F12, F31. **KW** Exporters. Exchange Rate Pass-Through. Market Share.

AB This paper explores the relationship between exchange rate pass-through nd market share for monopolistically competitive exporters. Under fairly eneral assumptions we show that pass-through should be high for exporters ased in a country with a very large share of total destination market sales. or source countries with small and intermediate markets shares, the heoretical relationship is potentially nonlinear and sensitive to ssumptions about the nature of consumer demand and firm interactions. The odel is estimated using a panel data set of automobile exports from France, ermany, Sweden, and the United States to a variety of destinations over the eriod 1970-1988. The empirical relationship between pass-through and market hare is significantly non-linear; pass-through is the lowest when the ource country's market share is around 45 percent and it is highest when he source country's share approaches 100 percent.

Fershtman, Chaim

PD August 1993. **TI** Social Status, Education and Growth. **AU** Fershtman, Chaim; Murphy, Kevin M.; Weiss, Yoram. **AA** Fershtman: Tel-Aviv University. Murphy: University of Chicago. Weiss: Tel-Aviv University and University of Chicago. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 8/93; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 33. **PR** no charge. **JE** O40, O12, J30, D90. **KW** Social Status. Growth.

AB A common feature of recent growth models is the existence of externalities associated with human capital. Each worker, in choosing his level of schooling or occupation, ignores the impact of his choice on future generations. Thus, in general, the level of investment in human capital is suboptimal. One possible corrective mechanism is to reward investment in human capital with social status. As recognized by sociologists, the occupational social status is an important factor in occupational choice. The paper investigates the implications of social rewards on the distribution of talents in society and consequently on the process of economic growth. We consider two sources of heterogeneity among workers: nonwage income and ability. We find that the drive for status may be counter productive, inducing an inefficient allocation of talent. A greater emphasis on status may induce the "wrong" individuals, i.e. those with low ability and high wealth to acquire schooling, causing workers with high ability but low wealth to leave the growth enhancing occupations. This crowding out effect, taken alone, discourages growth. In general, growth may be enhanced by an increase in the number of workers who invest in education. However, the inefficiency in the allocation of talent persists.

Fildes, Robert

PD April 1993. **TI** The Impact of Empirical Accuracy Studies on Time Series Analysis and Forecasting. **AU** Fildes, Robert; Makridakis, Spyros. **AA** Fildes: Lancaster University. Makridakis: INSEAD. **SR** INSEAD Working Papers: 93/29/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 26. **PR** not available. **JE** C22, C32, B41, A11. **KW** Forecasting Competitions. Experimentation. Replicability.

AB Social scientists envy the objectivity, controlled experimentation and replicability of hard sciences, a lack of which, they claim, hampers their ability to advance their disciplines and make them more useful and relevant to real life applications. This paper examines a specific area of social science, time series forecasting, which, through empirical studies using real-life data, allows for objectivity and replicability and offers the possibility of controlled experimentation. Yet its findings are ignored and its conclusions to advance the field of forecasting are disputed. The paper describes what has been learned from forecasting competitions and compares the results with expectations based on statistical theory. It demonstrates that considerable anomalies exist which have been neglected by academic statisticians who have focussed their attention on topics/directions of little practical value, and no relevance for real-life applications.

Fishelson, Gideon

PD August 1993. **TI** Political Events and Economic Trends: the Effects of the Intifada on the Israeli Economy. **AA** Tel-Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 10/93; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 17. **PR** no charge. **JE** C22, E65. **KW** Intifada. Israeli Economy. West Bank. Gaza. Intercept Shift.

AB The natural flows of economic activities are often disturbed by political- military exogenous events that cause the various economic activities to change course. Such event was the uprising-intifada-that started in December 1987 in the West Bank and Gaza, WBG, and which affected the economy of these areas as well as that of Israel. In this study we perform an econometric analysis aimed at detecting the change of levels and trends of the various real economic activities in Israel. The same time dependent behavioral model was applied to all activities. The findings indicate that the intifada did have significant effects from the statistical point of view on most

economic activities. The exceptions are various export activities.

Fisher, Anthony C.

TI Valuation and Management of Tropical Forests: A Theoretical and Empirical Analysis. AU Albers, Heidi, J.; Fisher, Anthony C.; Hanemann, W. Michael.

Flores de Frutos, Rafael

PD December 1992. TI Testing Theories of Economic Fluctuations and Growth in Early Development (The Case of the Chesapeake Tobacco Economy). AU Flores de Frutos, Rafael; Pereira, Alfredo M. AA Flores: Universidad Complutense. Pereira: University of California, San Diego. SR University of California, San Diego Department of Economics Working Paper: 92-52; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. PG 19. PR $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. JE C32, N11, O11. KW Staple Theory. Tobacco.

AB This paper suggests a general econometric approach to the empirical testing of the staple theory. The methodology is based upon a multivariate stochastic time series analysis adjusted to accommodate the presence of cointegration. Consistent with the nature of the problem under consideration, the methodology does not require any a priori structural assumptions about the dynamic relations among relevant variables. The empirical part of the paper focuses on the dynamic relationships among tobacco prices in the colonial Chesapeake economy and tobacco demand and supply conditions. The empirical evidence gives strong support to the basic tenets of the staple theory: the central role of the exogenous British demand; the existence of fluctuations in the price of tobacco; and, the high responsiveness of tobacco production with respect to prices relative to tobacco demand.

Franke, Gunter

PD December 1992. TI Idiosyncratic Risk, Sharing Rules and the Theory of Risk Bearing. AU Franke, Gunter; Stapleton, Richard C.; Subrahmanyam, Marti G.; AA Franke: University of Konstanz. Stapleton: Lancaster University. Subrahmanyam: New York University and INSEAD. SR INSEAD Working Papers: 93/02/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 40. PR not available. JE D81, G11. KW Precautionary Premium. Non-Insurable Risk.

AB It has been recognized in the literature that the choice of an agent between risky and riskless assets is complicated by the existence of other unavoidable risks. In this paper, we are concerned with the response of the agent to the existence of additional non-insurable income risk. In particular, the agent chooses state-dependent shares of aggregate marketable income (a sharing rule) to provide a partial hedge against the idiosyncratic risk. The paper first derives the properties of the precautionary premium in the presence of idiosyncratic risk and different levels of marketable income. It then analyzes the optimal behavior of the agent and shows that the higher the noninsurable risk, the more the agent purchases claims in states with low aggregate income and sells claims in states with high aggregate income - a type of insurance. In this context, the equilibrium is characterized by the sharing rules of the various agents in the economy. Then, the sensitivity of the equilibrium

to an increase in the non-insurable risk across all investors is analyzed.

Frascatore, Mark R.

PD January 1993. TI Credible Beliefs, Side Contract Negotiations, and Collusion in a Three Tier Hierarchy. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E93-02; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE D82, L14. KW Side Contracts. Collusion.

AB This paper addresses the issue of information transfer in side contract negotiations in a three tier hierarchy. Asymmetry of information between the supervisor and the agent may hinder collusion and prevent Pareto improvements. However, equilibrium refinement assumptions on type belief updating during side contract negotiations can eliminate such equilibria. This paper attempts to show that assuming "credible" belief updating may exclude the no-collusion, inefficient outcome, and bring about only collusion outcomes which are Pareto superior for the supervisor-agent coalition. Lastly, due to the unique collusive outcome, the principal knows from where the collusive behavior stems, and is allowed to manipulate the incentive scheme in the contract she offers to form a collusion-proof scheme. It is shown that she can form a collusion-proof contract, but the only effect is to dictate who gets the gains as a result of the contract.

Freeman, Richard B.

TI Did the Thatcher Reforms Change British Labour Performance? AU Blanchflower, David G.; Freeman, Richard B.

Fry, Jane M.

PD June 1993. TI The Stochastic Specification of Demand Share Equations: Restricting Budget Shares to the Unit Simplex. AU Fry, Jane M.; Fry, Tim R. L.; McLaren, Keith R. AA Monash University. SR Monash Department of Econometrics Research Working Paper: 3/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 26. PR no charge. JE D12, C51. KW Aggregation Restrictions. Additive Logistic Normal. Demand Share.

AB The traditional approach to estimating systems of share equations is to append a multivariate normal stochastic component to the deterministic component. The aggregation restrictions are then exploited to delete one equation and estimation is then carried out by maximum likelihood. Such an approach does not exploit the aggregation restrictions to their full extent, as there remains a non-zero probability of shares being negative or greater than unity. In this paper we take an approach, compositional data analysis, and a distribution familiar to statisticians, the additive logistic normal, and apply them to the estimation of a system of demand share equations. The results of this new approach are then compared to those of the traditional approach.

Fry, Tim R. L.

TI The Stochastic Specification of Demand Share Equations: Restricting Budget Shares to the Unit Simplex. AU Fry, Jane M.; Fry, Tim R. L.; McLaren, Keith R.

PD June 1993. TI Modelling the Victorian Road Toll. AA Monash University. SR Monash Department of Econometrics Research Working Paper: 4/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. PG 21. PR no charge. JE C51, R41, R48. KW Traffic Deaths. Road Safety. Recession.
AB In 1990, the Victorian road toll decreased 29% from the previous year to 548 fatalities at a time when the State's economy was (and still is) experiencing one of its worst recessions in history. With more government agencies assuming significant roles in the management of road safety in Victoria and investing greater amounts of resources to foster a safer road environment for its many users, it is timely and pertinent to investigate the impact of the various contributing factors on the road toll. In particular, "What impact have the economic recession and the various road safety measures, such as speed cameras, had?" This paper reports the results of modeling movements in the Victorian road toll for particular road user groups and in total using both linear and Poisson regression models.

Fullerton, Don
PD May 1993. TI Garbage, Recycling, and Illicit Burning or Dumping. AU Fullerton, Don; Kinnaman, Thomas C. AA Fullerton: Carnegie Mellon University and National Bureau of Economic Research. Kinnaman: University of Virginia. SR National Bureau of Economic Research Working Paper: 4374; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 12. PR $5.00. JE Q28, H21, H23. KW Garbage Collection. Optimal Fees. Output Tax.
AB Additional solid waste disposal imposes resource and environmental costs, but most residents still pay no additional fee per marginal unit of garbage collection. In a simple model with garbage and recycling as the only two disposal options, we show that the optimizing fee for garbage collection equals the resource cost plus environmental cost. When illicit burning or dumping is a third disposal option, however, the optimizing fee for garbage collection can change sign. Burning or dumping is not a market activity and cannot be taxed directly, but it can be discouraged indirectly by a system with a tax on all output plus a rebate on proper disposal either through recycling or garbage collection. This optimizing fee structure is essentially a deposit-refund system. The output tax helps achieve the first-best allocation even though it may affect the choice between consumption and untaxed leisure, because consumption leads to disposal problems while leisure does not.

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.

Gandal, Neil
PD August 1993. TI Licensing a Sequence of Innovations. AU Gandal, Neil; Rockett, Katharine. AA Gandal: Tel-Aviv University. Rockett: Northwestern University. SR Tel Aviv Foerder Institute for Economic Research Working Paper: 9/93; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. PG 12. PR no charge. JE L13, O31. KW Licensing. Innovations.
AB It is common for a firm which receives a license for a technology to obtain, as part of the contract, a license for future improvements on that technology. In this paper, we derive conditions under which a research lab licenses an initial technology and all future improvements to a single firms as a package ("bundling"), and conditions which yield a "period-by-period" decision of which firm to license. We show that the option to bundle licenses leads to a less competitive downstream industry than when the licensor is restricted to selling period-to-period licenses. In particular, the licensor prefers bundling whenever the high cost downstream firm would win the initial license in the period-by-period case.

Garner, Thesia I.
TI Estimating Unique Equivalence Scales. AU Johnson, David S.; Garner, Thesia I.

Gertler, Mark
TI U.S. Commercial Banking: Trends, Cycles, and Policy. AU Boyd, John H.; Gertler, Mark.

Ghoshal, Sumantra
PD not available. TI Release the Entrepreneurial Hostages from Your Corporate Hierarchy. AU Ghoshal, Sumantra; Bartlett, Christopher A. AA Ghoshal: INSEAD. Bartlett: Harvard University. SR INSEAD Working Papers: 93/27/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 21. PR not available. JE M12, M13, L22. KW Entrepreneurs. Corporate Organization. Management.
AB As competitive pressures increased in the 1980's, top-level managers in many companies became increasingly concerned about the growing lack of initiative, creativity and drive in their organizations. Knowing that the problem would be difficult to correct within their existing structures and systems, several began to experiment with new ways to ignite the creative spark in their people, and to protect and fan any resulting entrepreneurial flame. We study several European, Japanese and American companies practicing entrepreneurial management. Three key characteristics build and support an entrepreneurial process at the core of their organizations: (1) They have structured their organizations around small and disaggregated performance units. (2) They have institutionalized a set of simple and flexible planning, control and resource allocation systems to drive corporate performance. (3) They have articulated a clear strategic mission for the company as a whole and for each unit, and have established unambiguous performance standards for the whole organization.

Gilles, Christian
PD July 1993. TI Stochastic Bubbles in Markov Economies. AU Gilles, Christian; LeRoy, Stephen F. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-23; C/O Simon G. Gilchrist, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. PG 23. PR no charge. JE G10, G12. KW Stochastic Bubbles. Fundamentals.
AB We define rational bubbles as securities with payoffs occurring in the infinitely distant future. Restricting our attention to bubbles representable as limit points of nets of fundamental securities (securities with payoffs occurring in the finite future), we investigate the behavior of bubble values. We

show that in a Markov economy in which agents are risk-neutral, so that Arrow-Debreu prices are proportional to probabilities, the value of a bubble at any date is deterministic. In a Markov economy in which agents are risk-averse, the value of a bubble is shown to depend in a particular way on the current state.

PD July 1993. **TI** Identifying Monetary Policy With a Model of the Federal Funds Rate. **AU** Gilles, Christian; Coleman, John; Labadie, Pamela. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-24; C/O Simon G. Gilchrist, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 17. **PR** no charge. **JE** E50, E52, E40. **KW** Money. Interest Rates. Cash-in-Advance.
AB With a stochastic general equilibrium model, we highlight the role of both monetary policy and banks in determining the relationship between the federal funds rate and bank reserves. Monetary policy consists of a stochastic upward-sloping supply schedule for reserves, along with a discount window and open-market operations that are consistent with this schedule. The demand schedule for reserves by banks is downward sloping in the federal funds rate, so shifts in the supply schedule lead to a negative relationship between total reserves and the federal funds rate (a liquidity effect). Shifts in the demand schedule lead to a positive relationship, so the net effect over time depends on the relative magnitude of demand and supply shocks. The model with these features is simulated and compared to U.S. data.

Gilles, Robert P.

PD October 1991. **TI** Coalition Formation with Limited Communication: A Note. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E91-10-03; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** 7. **PR** no charge. **JE** C70, C71. **KW** Game Theory. Communication Graphs.
AB In game theoretic models of situations with limited communication between players one traditionally assumes that a coalition can form if (indirect) communication between the members is guaranteed, i.e., if it constitutes a connected subgraph of the undirected graph describing all communication links between players. In this note we show that the collection of formable coalitions is completely characterized by three properties.

TI A Social Power Index for Hierarchically Structured Populations of Economic Agents. **AU** van den Brink, Rene; Gilles, Robert P.

PD February 1992. **TI** Games with Permission Structures: The Disjunctive Approach. **AU** Gilles, Robert P.; Owen, Guillermo. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E92-04; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** not available. **PR** no charge. **JE** L22, C71. **KW** Hierarchy. Chain of Command. Cooperative Games.
AB In many organization structures economic decisions are made through a chain of decision makers. In this paper we give a game theoretic analysis of such an organization structure. It is

assumed that every player in such a hierarchical organization structure has to get permission for his actions from at least one chain consisting of subsequent superiors. The application of this assumption is indicated as the Disjunctive approach to cooperative games with a permission structure. We analyze the consequences of adopting this assumption with respect to games with transferable utilities in characteristic function form. A computation method for the Shapley value for these Disjunctive games with a permission structure is provided. We show that a competition among superiors over the leadership of a subordinate may lead to a higher payoff of the subordinate in the presence of more superiors. This feature is used to show that even in the presence of very small transaction costs the formation of a hierarchical firm is Pareto superior to the situation without such a hierarchical firm.

TI Axiomatizations of the Conjunctive Permission Value for Games with Permission Structure. **AU** van den Brink, Rene; Gilles, Robert P.

TI Measuring the Dominance Power of Nodes in Directed Graphs. **AU** van den Brink, Rene; Gilles, Robert P.

PD October 1992. **TI** Coalition Formation in Large Network Economies. **AU** Gilles, Robert P.; Ruys, Pieter H. M.; Shou, Jilin. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E92-25; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** not available. **PR** no charge. **JE** D10, D20. **KW** Social Organization. Network Economy.
AB In large social systems with a restricted relational pattern between agents there emerge natural (social) organization structures. We focus our attention to one such a structure, called a network. It turns out that these networks usually exist in a deterministic graph-theoretic setting. Networks can be interpreted as potential or latent organization structures, of which one eventually will emerge. This paper is concerned with the question whether in large economies with a restricted relational pattern there exist such potential organization structures. In that case, such a social system is called a network economy. In this paper we state and prove some existence results for a substantial class of network economies with deterministic relational patterns. We conclude this paper with an application of the developed framework with respect to the definition of a core concept for a large network economy. We show that this core is equal to the core of the large economy underlying the network economy.

TI Efficiency in an Economy with One Public Project. **AU** Diamantaras, Dimitrios; Gilles, Robert P.

TI Efficiency in Economies with One Public Project. **AU** Diamantaras, Dimitrios; Gilles, Robert P.

TI Ranking the Nodes in Direct and Weighted Directed Graphs. **AU** van den Brink, Rene; Gilles, Robert P.

TI Hierarchical Organization Structures and Constraints on Coalition Formation. **AU** Derks, Jean J. M.; Gilles, Robert P.

PD August 1993. **TI** Modelling of Economies with Relational Constraints on Coalition Formation. **AU** Gilles, Robert P.; Haller, Hans H.; Ruys, Pieter H. M. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E93-13; Department of Economics, Virginia

Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** not available. **PR** no charge. **JE** D51. **KW** Exchange Economy. Trade Coalition. Trade Network.
AB This paper presents an overview of different mathematical techniques to model constraints on coalition formation in the context of a pure exchange economy. We discuss three such models. The first one is a measure theoretic model, in which the Edgeworthian recontracting processes are carried out by a sparse collection of well specified primitive coalitions rather than on the assumption that in principle every group of economic agents is formable as a trade coalition. Second, we discuss a relational model of coalition formation. In this model we investigate the underlying economic principles that link social trade relations between economic agents and the individual attributes of these agents. Third, we study an enhancement of the relational model in which a particular group of economic agents form a trade network in the economy. Such a network performs as a natural market auctioneer, although we limit our discussion to coalition formation in the context of these trade networks.

Goetzmann, William
TI Commodity Funds as an Investment Asset. **AU** Edwards, Franklin; Goetzmann, William.

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

Gonul, Fusun
PD June 1993. **TI** Consumer Purchase Behavior in a Frequently Bought Product Category: Estimation Issues and Managerial Insights From a Hazard Function Model With Heterogeneity. **AU** Gonul, Fusun; Srinivasan, Kannan. **AA** Carnegie Mellon University. **SR** Gonul · and Srinivasan: Economics Research Center/NORC Discussion Paper: 93-1; Economics Research Center/NORC, 6030 S. Ellis, CHICAGO, Illinois 60637. **PG** 19. **PR** $2.00 from the NORC librarian. **JE** C40, M30. **KW** Marketing Application. Fixed Effects. Random Effects. Hazard Function Models.
AB We apply hazard function models to marketing data on household purchases of disposable diapers in order to calibrate repeat purchase and brand switch behavior. In the model, we allow for household-specific unobserved traits. Hazard function models with fixed effect heterogeneity specification are computationally feasible. We directly compare the results of fixed and random effects heterogeneity specifications in the context of parametric and nonparametric duration dependence functions. We find that a rigorous test fails to reject the random effect specification in favor of the fixed effects specification. The unimodal Gamma distribution in the random effects specification adequately captures unobserved heterogeneity.

Goodman, Matthew
PD November 1992. **TI** Telephone Company Entry into Cable Television: A Re-Evaluation. **AU** Goodman, Matthew; Lu, Kevin; Sharkey, William W.; Srinagesh, Padmanabhan; Stolleman, Neal. **AA** Bellcore. **SR** Bellcore Economics Discussion Paper: 96; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. **PG** not available. **PR** not available. **JE** L96. **KW** Broadband Network. Telecommunications. Regulation.

AB In a recent issue of Telecommunications Policy, L.L. Johnson and D.P. Reed (J and R) address an important regulatory issue concerning the "economy of scope" of integrated broadband networks versus separate voice and cable TV networks. While we agree that the policy question raised by J and R is an important one, we do not believe that the technical question of economy of scope has been resolved, as their analysis seems to suggest. We address three major points:(i) technological advances, primarily in video compression have fundamentally altered the architectural models and economics of local loop design of an integrated broadband network, shifting the focus from Fiber-to-the-Home toward Fiber-to-the Curb; (ii) technological and statistical uncertainties were not addressed in the J and R analysis; (iii) by focusing only on video entertainment services, the J and R revenue potential is too conservative. Based on our argument that the question of economies of scope for an IBN is sensitive to the details of the assumed transport architecture and to technology forecasts, we conclude that the question of the economy of scope of integrated networks is, at present, open. Moreover, we agree with J and R's conclusion that the larger policy question should not be resolved on the narrow question of economy of scope, and certainly not by a single engineering cost analysis.

Gosling, Amanda
PD April 1993. **TI** Trade Unions and the Dispersion of Earnings in U.K. Establishments 1980-90. **AU** Gosling, Amanda; Machin, Stephen. **AA** University College, London. **SR** University College London Discussion Paper: 93-05; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. **PG** 20. **PR** 3 pounds; checks payable to Dept. of Economics, UCL. **JE** J51, J31. **KW** Unions. Wage Dispersion.
AB In this paper we examine the relationship between unions and earnings dispersion using data from the 1980, 1984 amd 1990 Workplace Industrial Relations Surveys. The initial focus is on the cross-section relationship using the 1990 data and unionized establishments are seen to have lower earnings dispersion for skilled and semi-skilled workers. Second, within-establishment earnings dispersion is lower in 1990 amongst plants with recognized unions. We then use all three surveys to see to what extent the changing nature of union structure in the U.K economy has contributed to the rise in earnings inequality for semi-skilled workers. Our findings point to an important increase in the gap between dispersion in union and non-union plants between 1980 and 1990. For semi-skilled workers, the decline in the share of plants with recognized unions can account for almost 20% of the coincident rise in earnings inequality. The bulk of the overall rise in earnings inequality is, however, down to a large increase in earnings dispersion across non-union establishments.

Gourieroux, Christian
TI Models Lineaires a Facteurs et Structure a Terme des Taux D'interet. **AU** Clement E.; Gourieroux, Christian; Monfort, Alain.

TI Prevision de Mesures de Prix Contingents. **AU** Clement, E.; Gourieroux, Christian; Monfort, Alain.

TI Prediction of Contingent Price Measures. **AU** Clement, E.; Gourieroux, Christian; Monfort, Alain.

Gozalo, Pedro L.

AB Nonparametric kernel regression estimation techniques are applied to two issues of empirical demand analysis: the importance of household demographic variables on demand analysis, and testing of some of the parametric specifications used to incorporate demographic effects into demand systems. The results are based on the 1985 Consumer Expenditure Survey for the U.S. Nonparametric methods prove to be an excellent medium for the analysis of demographic effects using expenditure data. In particular, we show that the additivity of the age of the reference person, assumed by most parametric models, is not supported by the data. We also show that the coefficients of equivalence scales depend not only on household composition, but also on the level of income and the age of the reference person, questioning some of the assumptions used to construct most parametric equivalence scales. Nonparametric consistent misspecification tests are applied to test for exclusion of some of the demographic variables included in the regression model, to test for the correct specification of the demand function in per capita form, and to test the correct specification of demographic translating. These tests have the advantage over parametric tests of not being influenced by the choice of functional form made for our model.

Grandmont, Jean-Michel

AB It is not unfrequent to see studies of imperfect competition or 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 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.

Granger, C. W. J.

AB It is well established that many economic series contain dominant, smooth components, even after removal of simple deterministic trends. This is particularly true for series from finance and macroeconomics. A traditional way to model these components is as random walks, leading to I(1) and ARIMA (p,l,q) models in the Box and Jenkin's (1970) terminology. The success of such models with economic data and relationships between groups of such series, including the idea of cointegration, has resulted in a considerable literature and special statistical techniques to handle the problems of inference with data having this property. A small part of this literature is included in the book of readings by Engle and Granger (1991). A popular theme is econometric modelling in models with changing parameters, such as time-varying parameter models using the Kalman filter approach; or regime-switching models; or "structural breaks". As technology tastes, and policies change it is easy to visualize and to rationalize parameter values changing. A link with the unit root process is the deterministic seasonal unit root process, suggested by Osborn (1988) and also considered by Frances (1991). The majority of this paper considers a stochastic generalization of this idea, but not necessarily with an emphasis on seasonality.

AB The property of "long-memory" as defined in the time series literature relates to a series having a finite spectrum at (essentially) all frequencies but infinite at the zero frequency. The fractionally integrated processes have this property but in this paper it is pointed out that many other generating mechanism can produce such processes at least in theory. These new classes will often be of more theoretical interest than of practical relevance, but we have shown that on some occasions at least time-varying parameter models are worth consideration.

Graziano, Clara

AB We analyze the "make-or-buy" decision of a firm that needs several inputs to realize a project. We focus on the

interplay between contracting and bargaining in the context of a simple model with asset specificity and contractual incompleteness. We extend the two-player setting by analyzing a situation in which the buyer procures inputs from several suppliers and the level of investment. Suppliers have lower cost than the buyer and therefore a cost saving is realized for each input bought from a supplier. On the other hand, buying inputs from suppliers induces a bargaining cost associated with changing some of the characteristics of the inputs specified in the original contract. We show that when agreements with all suppliers must be reached, the buyer's bargaining power decreases with the number of suppliers. As a result, he appropriates a smaller fraction of the return from the investment. In this case the buyer may be better off purchasing a number of inputs smaller than the first best.

Green, David A.
PD   September 1993. TI   Qualifying for Unemployment Insurance: An Empirical Analysis. AU   Green, David A.; Riddell, W. Craig. AA   University of British Columbia. SR   University of British Columbia Department of Economics Discussion Paper: 93-33; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG   65. PR   JE   J65. KW   Employment Duration. Hazard Rates.
AB   Little is known about the effect of unemployment insurance (UI) on employment durations. In this paper we take advantage of a unique accidental experiment in the Canadian UI system which created an exogenous increase in the entrance requirement (the number of weeks an individual must work to qualify for benefits) of up to 4 weeks in some regions. We identify the effects of this increase primarily by comparing the hazard rate out of employment for the experimental year, 1990, with that for the preceding year in regions where other parameters of the UI system do not change. We find that increasing the entrance requirement leads to significant increases in employment spell durations near the entrance requirement number of weeks. Low wage workers in seasonal industries are the most affected by the changes. The fact that employment duration changes are much more pronounced in spells ending in layoffs than in those ending in quits, along with other evidence, suggests that the observed adjustment involves firms as well as workers.

Griese, Joachim
TI   EDI in Europe - Empirical Analysis of a Multi-Industry Study. AU   Krcmar, Helmut; Bjorn-Andersen, Niels; Eistert, Torsten; Griese, Joachim; Jelassi, Tawfik; O'Callaghan, Ramon; Pasini, Paolo; Ribbers, Peter.

TI   EDI in Europe - Empirical Analysis of a Multi-Industry Study. AU   Krcmar, Helmut; Bjorn-Andersen, Niels; Eistert, Torsten; Griese, Joachim; Jelassi, Tawfik; O'Callaghan, Ramon; Pasini, Paolo; Ribbers, Peter.

Grossman, Michael
PD   June 1993. TI   Effects of Alcohol Price Policy on Youth. AU   Grossman, Michael; Chaloupka, Frank J.; Saffer, Henry; Laixuthai, Adit. AA   Grossman: CUNY Graduate School and National Bureau of Economic Research. Chaloupka: University of Illinois, Chicago and National Bureau of Economic Research. Saffer: Kean College of New Jersey and National Bureau of Economic Research. Laixuthai: University of Illinois, Chicago. SR   National Bureau of Economic Research Working Paper: 4385; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   21. PR $5.00. JE   H22, H23. KW   Excise Taxes. Alcohol Consumption.
AB   In this paper we summarize research that deals with the effects of alcoholic beverage prices and excise taxes on a variety of outcomes for youth. These include alcohol consumption, excessive consumption, motor vehicle accident mortality, and college completion rates. The research employs six nationally representative data sets on individuals that span the period from 1974 through 1989 and two state level data sets for the years 1975-1981 and 1982-1988. The studies find that alcohol use and motor vehicle accident mortality are negatively related to the cost of alcohol. College completion rates are positively related to this variable. Clearly, these are policy-relevant findings since price is a policy-manipulable variable. Frequently, the effects of a variety of simulated excise tax hikes exceed those of the uniform minimum legal drinking age of 21 in all states.

Grossman, Philip
TI   The Price of Fairness: Gender Differences in Punishment Games. AU   Eckel, Catherine C.; Grossman, Philip.

TI   Chivalry and Solidarity in Ultimatum Games. AU   Eckel, Catherine C.; Grossman, Philip

Groves, Theodore
PD   October 1992. TI   Two Essays on Voting Procedures and the Budget Deficit. AA   University of California, San Diego. SR   University of California, San Diego Department of Economics Working Paper: 92-42; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. PG   15. PR $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. JE   D72, D70, H60, H61. KW   Budget Deficits. Voting Rules.
AB   Two essays develop an alternative procedure for enacting Federal budgets that alters the incentives for approving expenditures and taxes and thus leads to lower federal deficits. Essay 1 outlines a theorem which shows that deficits under the alternative procedure-which requires expenditures to be balanced by revenues as they are enacted followed by an explicit vote on the size of tax reduction from a balanced budget status quo-are generally lower than the current procedure - which is characterized by unlinked, independent votes on expenditures and taxes. Essay 2 is an argument for the new procedure to be adopted for the U.S. Congress. The way the incentives would be changed under the new procedure are discussed as applying to new expenditure programs, to entitlement and other permanent expenditure programs, and tax reduction.

PD   December 1992. TI   Optimal Monitoring of Oil Spills: Control in a Stochastic, Dynamic Context. AU   Groves, Theodore; Stinchcombe, Maxwell B.; Viladrich, Montserrat. AA   Groves and Stinchcombe: University of California, San Diego. Viladrich: University of New Mexico, Albuquerque. SR   University of California, San Diego Department of Economics Working Paper: 92-48; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. PG   39. PR $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. JE   L95, Q48. KW   Oil Spills.

Monitoring. Regulation.
AB   Accidental spills, while inherently random processes, are influenced by preventive actions taken by ship-owners. Coast Guard vessel inspection and oil transfer monitoring policies for controlling oil spills are designed to control both deliberate and accidental spills. Ship-owners' responses to regulation affect the Coast Guard's costs of inspection and monitoring We capture this interaction of policy, preventive actions, and costs in a Stackelberg-like game-theoretic model. Post-1983 Coast Guard policies for inspection and monitoring include a two-tiered classification of oil transporting vessels. Ships failing inspections or with a history of oil spills are put on a High Priority list and subject to more frequent inspection and monitoring. We show that the punitive value of keeping a vessel on the High Priority list can be a cheap way of enforcing regulations. We also discuss the findings of recent empirical studies of Coast Guard policies.

Grubb, Farley
PD   July 1993. TI   The End of European Immigrant Servitude in the United States: An Economic Analysis of Market Collapse, 1772-1835. AA   University of Delaware. SR   University of Delaware Department of Economics Working Paper: 93-06; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware   19716-2720.   PG   19.   PR   not available. JE   N31, N33, F22, O15. KW   Immigration. Migration.
AB   Europeans stopped using servitude to finance passage to America sometime in the early nineteenth century, but exactly when and why immigrant servitude disappeared is a mystery. Hypotheses abound, but no consensus has emerged nor has hypothesis testing been done. In this study, quantitative evidence for the final sixty years of immigrant servitude is used to establish when and why it disappeared. Servitude did not end because of insufficient demand, legal restrictions, or declines in passage fares. It ended because superior methods of financing migration were developed. The exact timing of its end, however, was determined by chance historical events.

Gruenwald, Paul F.
TI   The Existence of an Optimal Path in a Growth Model with Endogenous Technical Change.   AU   Chichilnisky, Graciela; Gruenwald, Paul F.

Guinnane, Timothy W.
PD   September 1993. TI   Financial Market Interpretations of Civil War News. AU   Guinnane, Timothy W.; Rosen, Harvey S.; Willard, Kristen L.   AA   Guinnane: Yale University. Rosen and Willard: Princeton University. SR   Princeton Financial Research Center Memorandum: 142; Financial Research Center, Department of Economics, Princeton University, Princeton, NJ 08544-1021. PG   23. PR $3.00 for U.S. mailings. $6.00 for foreign mailings. JE   N21, E42, D84, A12, G10. KW   Speculators. Policy Credibility. Turning Points.
AB   In early 1862, the United States government began issuing Greenbacks, a legal tender currency that was not convertible into gold. The government promised to redeem the Greenbacks in gold eventually, but speculators understood that the probability of redemption depended on Union Army military fortunes and other events that affected the total cost of the war. To serve the speculative interest in gold, a market emerged for the purpose of trading Greenbacks for gold dollars.

Because the market price of a Greenback reflected the public's perceptions of future war costs, the movement of these prices provides unique insights into how people at the time perceived various events. We use daily quotations of the gold price of Greenbacks to identify a set of dates during the Civil War that market participants regarded as turning points. In some cases, these dates coincide with events familiar from conventional historical accounts of the war. In other instances, however, market participants reacted strongly to events that historians have not viewed as very significant.

Hajivassiliou, Vassilis
PD   January 1992. TI   A Note on the Dual Approach to the Existence and Characterization of Optimal Consumption Decisions Under Uncertainty and Liquidity Constraints. AU   Hajivassiliou,   Vassilis;   Ioannides,   Yannis   M. AA   Hajivassiliou: Yale University. Ioannides: Virginia Polytechnic Institute and State University. SR   Virginia Polytechnic Institute and State University Working Paper in Economics: E92-03; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG   25. PR   no charge. JE   D91, E21, D81. KW   Savings. Borrowing Constraints. Duality.
AB   This paper considers a dual approach to the problem of maximizing lifetime utility subject to liquidity constraints in a discrete time setting. These constraints prohibit the decision maker from borrowing against future endowment income. The dual approach allows us to exploit directly the supermartingale property of the marginal utility of expenditure and to establish existence and uniqueness of the optimal solution. The optimal solution is interpreted as deriving from a version of the problem that is subject to a single lifetime budget constraint, where expenditures and incomes are discounted to the beginning of the horizon by means of individualized Arrow-Debreu prices.

Hall, Bronwyn H.
PD   May 1993. TI   Exploring the Productivity of Research and Development in French Manufacturing Firms. AU   Hall, Bronwyn H.; Mairesse, J. AA   Hall: National Bureau of Economic Research. Mairesse: ENSAE-CREST. SR   Unite de Recherche Document de Travail ENSAE/INSEE: 9326; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG   24. PR   no charge. JE   D24, C33, O32.   KW   Productivity. Research. Development Panel Data.
AB   This paper uses a newly available dataset on the R&D investment of individual French manufacturing firms for the 1980's to replicate and update a series of studies on French R&D and productivity at the firm level during the 1970's. The focus of the paper is on the use of a single dataset to evaluate the robustness of the methods commonly used to measure the private returns to R&D. Our main findings are the following: having a longer history of R&D expenditures seems to help in improving the quality of the R&D elasticity estimates, but the choice of depreciation rate for R&D capital makes little difference to them. The correction for double counting of R&D expenditures in capital and labor is important and may be interpreted under certain conditions as converting a measured "excess" rate of return to a total rate of return to R&D. We show that the direct production function approach to measuring the returns to R&D capital is preferred on several ground over the rate of return variation which has been used in the past. Finally, as already found in the 1970's, the productivity of R&D capital

for French manufacturing firms in the 1980's is positive; it is more or less strongly and robustly so, depending on whether or not we control for potential industry and firm effects.

Haller, Hans H.

PD April 1992. TI Ratifying Quorum and Bargaining Power. AU Haller, Hans H.; Holden, Steinar. AA Haller: Virginia Polytechnic Institute and State University. Holden: University of Oslo. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-05; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG 31. PR no charge. JE C78, D72. KW Group Bargaining. Voting. Ratification.
AB When a large group of people is affected by the outcome of a bargaining, practical reasons require that the group is represented by an agent in the bargaining. This paper addresses the following questions: Should the agent have commitment power on behalf of the group, or should a tentative agreement be subject to voting by the group on whether or not to accept the agreement? Furthermore, if there is to be such a voting, how large should the ratifying quorum be, that is, how large a majority of the group should vote in favor of the agreement to validate it?.

PD June 1992. TI Strategic Choice of Market Contacts. AU Haller, Hans H.; Ioannides, Yannis M. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-18; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG 25. PR no charge. JE C72, D40, L10. KW Market Games. Market Formation.
AB Contact and communication between economic agents constitute an important prerequisite for trade. We set up two-person games, where contacting requires a vector input of resources and is subject to strategic choice and agents' characteristics are diverse. Desirable trades may be consummated only if the "cost distance" is bridged by the two parties' contributing sufficiently to the total amount of cost. Agents' payoffs depend, for any given trade allocation rule, on how contacting costs are shared. We show existence of equilibrium and explore the properties of the game. We demonstrate by means of a number of examples that autarky or a multiplicity of Nash equilibria, some of which are Pareto rankable, are possible outcomes. We also explore examples of three-person games.

TI Modelling of Economies with Relational Constraints on Coalition Formation. AU Gilles, Robert P.; Haller, Hans H.; Ruys, Pieter H. M.

Hamermesh, Daniel S.

PD July 1993. TI Labor Demand and the Source of Adjustment Costs. AA University of Texas and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4394; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR $5.00. JE J20, J30, J23, J63. KW Dynamic Labor Demand. Adjustment Costs.
AB Most models of dynamic labor demand are written in terms of costs of adjusting employment (net adjustment costs). A few are based on the costs of hiring and firing (gross adjustment costs). This study derives several models containing both types of adjustment costs. A dynamic-programming model with quadratic adjustment costs generates an estimate of the lower bound on the fraction of adjustment costs that are gross costs. A model with lumpy costs of adjustment also estimates the relative sizes of the two types of costs. The models are estimated over two sets of short monthly time series obtained from private sources, one from a medium-size hospital, the other describing three plants operated by a small manufacturing firm. The quadratic-cost model is also estimated using data describing small industries. The estimates demonstrate that the importance of the two types of costs differ across establishments, though gross adjustment costs appear relatively larger. The results provide evidence on issues of asymmetry in business cycles and the role of human capital in generating externalities in economic growth.

Hanemann, W. Michael

TI Valuation and Management of Tropical Forests: A Theoretical and Empirical Analysis. AU Albers, Heidi, J.; Fisher, Anthony C.; Hanemann, W. Michael.

PD July 1993. TI Marginal Cost Pricing and the New LADWP Water Rates. AA University of California, Berkeley. SR University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 682; Department of Agricultural and Resource Economics, 313 Giannini Hall, UC Berkeley, Berkeley, CA 94720. PG 13. PR $5.00. JE L95, Q40, Q45. KW Water Rates. Public Utility. Pricing.
AB The existence of spot markets for electricity together with the presence of techniques for generating electricity, such as gas turbine or hydropower that can essentially be turned on and off at will, imply that the marginal cost curve for electricity is fundamentally elastic. The cost may be steep, but you can always be sure of obtaining an incremental supply of electricity from somewhere. By contrast, I would argue that the marginal cost curve of water for an urban water utility is more apt to be inelastic. You can obtain water from particular sources that have been arranged ahead of time, but once you exhaust these sources, you are out of luck - you would have to turn to some form of rationing or voluntary demand reduction. The difference between the shapes of the marginal cost curves is significant because they imply different pricing rules. In the case of the elastic marginal cost curve, the challenge in ratesetting is essentially to determine which are the marginal sources of supply and what are their costs. Once these are known, the rate structure follows fairly simply-you want to ensure that users at the margin pay whatever is the cost of the marginal source. By contrast, in the case of the inelastic marginal cost curve, the task may be different - the focus may be chiefly on determining what price it will take to ration demand to keep it within the bounds of available supply. In these circumstances, while it is still useful to know about marginal cost, it is even more important to know about the demand function.

PD August 1993. TI Natural Resource Damage Assessment: Economic Implications for Fisheries Management. AU Hanemann, W. Michael; Strand, Ivar E. AA Hanemann: University of California, Berkeley. Strand: University of Maryland. SR University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 686; Department of Agricultural and Resource Economics, 313 Giannini Hall, UC Berkeley,

Berkeley, CA 94720. **PG** 13. **PR** $5.00. **JE** Q00, Q22, Q20. **KW** Water Policy. Natural Resource Negotiations. Water Allocations.

AB In this paper we consider similarities and contrasts between the economic concepts and procedures used in connection with natural resource damages assessment and those that arise in connection with fisheries management. Federal fisheries management proceeds with limited economic rationale, even though the sway of economic analysis has been greater in the 1990's. Although a part of a typical Fisheries Management Plan (FMP) under the Magnuson Fisheries Conservation and Mangement Act (MFCMA), economic analyses have been rarely pivotal in U.S. management decisions. Recently, however, economic instruments such as individual transferable quotas (ITQ's) and economic logic such as benefit cost analysis have begun to play a significant role in the allocation of fisheries resources analysis and to provide a coherent economic argument for politicians, bureaucrats and the public. The problem arises because of the fragmentation in the legal and political setting within which economic analysis is conducted and the fact that these different entities have different viewpoints and adopt a different guidelines.

Hansen, Lars Peter

PD September 1993. **TI** Back to the Future: Generating Moment Implications for Continuous-Time Markov Processes. **AU** Hansen, Lars Peter; Scheinkman, Jose Alexandre. **AA** Hansen: University of Chicago, NORC, and National Bureau of Economic Research. Scheinkman: University of Chicago. **SR** National Bureau of Economic Research Technical Paper: 141; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $2.00. **JE** C10. **KW** Markov Process. Moment Conditions. Generators.

AB Continuous-time Markov processes can be characterized conveniently by their infinitesimal generators. For such processes there exist forward and reverse-time generators. We show how to use these generators to construct moment conditions implied by stationary Markov processes. Generalized method of moments estimators and tests can be constructed using these moment conditions. The resulting econometric methods are designed to be applied to discrete-time data obtained by sampling continuous-time Markov processes.

PD October 1993. **TI** Econometric Evaluation of Asset Pricing Models. **AU** Hansen, Lars Peter; Luttmer, Erzo; Heaton, John. **AA** Hansen: University of Chicago and National Bureau of Economic Research. Luttmer: Northwestern University. Heaton: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 145; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $2.00. **JE** G12, C13, C15. **KW** Asset Pricing. Consistency. Market Frictions.

AB In this paper we provide econometric tools for the evaluation of intertemporal asset pricing models using specification-error and volatility bounds. We formulate analog estimators of these bounds, give conditions for consistency and derive the limiting distribution of these estimators. The analysis incorporates market frictions such as short-sale constraints and proportional transactions costs. Among several applications we show how to use the methods to assess specific asset pricing

models and to provide nonparametric characterizations of asset pricing anomalies.

Hardman, Anna M.

PD January 1992. **TI** Moving Behavior, Housing Market Reform and Growth. **AU** Hardman, Anna M.; Ioannides, Yannis M. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E92-02; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** 18. **PR** no charge. **JE** R21, D91, D50, E21. **KW** Residential Mobility. Rent Control.

AB The present paper integrates households' moving behavior into a two-sector infinite overlapping-generations general equilibrium model. Households may adjust their housing consumption only by moving (which is costly), while they can alter their non-housing consumption as they wish at no cost. We use the model to study general equilibrium in the steady state under alternative settings for the housing market. In a standard setting individuals optimize with respect to housing and non-housing consumption and the number of residential moves over the lifetimes. The real interest rate and the price of housing are determined in general equilibrium and the impact upon these values of the utility cost of residential mobility is analyzed. In an alternative setting, we consider that a ceiling is imposed on the price for housing services.

Hardouvelis, Gikas A.

PD October 1992. **TI** Intertemporal Asset Pricing Models and the Cross Section of Expected Stock Returns. **AU** Hardouvelis, Gikas A.; Kim, Dongcheol; Wizman, Thierry A. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 9218; Research Department - Room 901, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. **PG** 48. **PR** no charge. **JE** G12. **KW** Consumption. Market Return. Risk Factors.

AB Unlike intertemporal models with a consumption risk factor constructed from measured consumption data, in Campbell's (1992) two-factor model, both the stock market factor and the consumption factor -- constructed without the use of measured consumption data -- are positively priced in the cross section of domestic stock returns. However, neither the Campbell model nor its unrestricted multifactor version can explain the accounting variable anomalies summarized in Fama and French (1992). Controlling for the theoretical risk factors, a lower market equity and especially a higher ratio of book-to-market equity continue to be associated with higher expected stock returns.

Harvey, Andrew C.

PD July 1993. **TI** Seasonality in Dynamic Regression Models. **AU** Harvey, Andrew C.; Scott, Andrew. **AA** Harvey: London School of Economics. Scott: Oxford University and London School of Economics. **SR** London School of Economics Suntory-Toyota International Centre for Economics and Related Disciplines Working Paper:EM/93/266; London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 28. **PR** not available. **JE** C13, C50, E31. **KW** Seasonality. Error Correction. Dynamic Relationships.

AB This paper examines the implications of treating

seasonality as an unobserved component which changes slowly over time. This approach simplifies the specification of dynamic relationships by separating nonseasonal from seasonal factors. We illustrate this approach using consumption model of Davidson et al (1978) and estimate a stable error correction model between consumption, income and prices over the period 1958-92. More generally, we argue that autoregressive models are unlikely to successfully model slowly changing seasonality and may confound seasonal effects with the dynamic responses of prime interest. Our approach can be used in a wide range of cases and we show that there is little loss in efficiency even if seasonality is deterministic.

PD August 1993. **TI** Estimation and Testing of Stochastic Variance Models. **AU** Harvey, Andrew C.; Shephard, Neil. **AA** Harvey: London School of Economics. Shephard: Oxford University. **SR** London School of Economics Suntory-Toyota International Centre for Economics and Related Disciplines Working Paper: EM/93/268; London School of Economics, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 16. **PR** not available. **JE** C12, C13. **KW** Generalized Least Squares. Heteroskedasticity. Quasi-Maximum Likelihood. Smoothing. Volatility.
AB A stochastic variance model may be estimated by a quasi-maximum likelihood procedure by transforming to a linear state space form. The properties of observations corrected for heteroskedasticity can be derived. A model with explanatory variables can be handled by correcting the observations for heteroskedasticity after estimating a stochastic variance model from the OLS residuals and then constructing a feasible GLS estimator. A model with stochastic variance, or standard deviation, as an explanatory variable can be formulated. The paper explores the properties of these procedures and shows how they may be used as part of a model specification strategy. It is argued that the approach is relatively robust since distributions need not be specified for the disturbances.

Hassett, Kevin A
TI Reassessing the Social Returns to Equipment Investment. **AU** Auerbach, Alan J.; Hassett, Kevin A; Oliner, Stephen D.

Hawawini, Gabriel
PD January 1993. **TI** The Japanese Presence in the European Financial Services Sector: Historical Perspective and Future Prospects. **AU** Hawawini, Gabriel; Schill, Michael. **AA** INSEAD. **SR** INSEAD Working Papers: 93/06/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 35. **PR** not available. **JE** G20, G21, F23. **KW** Financial Institutions. Japanese Banks. European Financial Sector.
AB Into the late 1980's, Japanese financial institutions were a growing presence in the European financial services sector. The strong growth of Japanese financial institutions in Europe can be linked to two aspects of the competitive advantage of Japanese firms in the 1980's: the success of Japanese industrial clients abroad and the competitive cost advantage of Japanese financial institutions. The relative cost advantage appears to be due to such macroeconomic factors as the appreciation of the yen, advantageous cost of capital, and strong gains in the stock and real-estate markets, as well as the success of Japanese banks in implementing a strategy of high operating efficiency which offsets their disadvantage at competitive differentiation. Developments in the 1990's indicate an important erosion of

many of the factors which supported the competitive advantage of Japanese financial institutions in Europe. In the 1990's, Japanese financial institutions face a tough, if not insurmountable, challenge in maintaining their position in Europe.

PD January 1993. **TI** Current State and Expectations for European Equity Trading Within the Common Market. **AU** Hawawini, Gabriel; Schill, Michael. **AA** INSEAD. **SR** INSEAD Working Papers: 93/07/FIN; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. **PG** 29. **PR** not available. **JE** G10. **KW** Stock Markets. Derivative Markets.
AB This paper reviews the current state of European stock markets and examines the impact that a number of recent developments (such as the Eurolist, derivative markets, competition among European financial centers and the emergence of new trading technologies) may have on the future of equity trading within the European Community.

Heal, Geoffrey M.
TI Arbitrage, Equilibrium and the Pareto Frontier in L sub p and Sobolev Spaces. **AU** Chichilnisky, Graciela; Heal, Geoffrey M.

TI On the Existence and the Topology of Equilibria in Incomplete Asset Markets. **AU** Chichilnisky, Graciela; Heal, Geoffrey M.

Heaton, John
TI Econometric Evaluation of Asset Pricing Models. **AU** Hansen, Lars Peter; Luttmer, Erzo; Heaton, John.

Helwege, Jean
TI Alternative Tests of Agency Theories of Callable Corporate Bonds. **AU** Crabbe, Leland; Helwege, Jean.

Hines, James R., Jr
PD July 1993. **TI** Altered States: Taxes and the Location of Foreign Direct Investment in America. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4397; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** $5.00. **JE** E22, H71, F21. **KW** Foreign Investment. Tax Credits.
AB This paper examines the effect of taxation on foreign investment and on business location within the United States. The idea is to compare the inter-state distribution of investments from certain foreign countries (those with foreign tax credit systems) with the distribution of investments from other countries. Investors from countries with foreign tax credit systems receive home-country tax credits for income taxes paid to U.S. states, so they are less likely than are other investors to avoid investing in high tax states. The results indicate that 1% differences in state corporate tax rates are associated with 7-9% differences between the investment shares of foreign tax credit investors and the investment shares of all others, suggesting that state taxes significantly influence the pattern of foreign direct investment in the U.S.

PD July 1993. **TI** From Each According to His Surplus: Equi-Proportionate Sharing of Commodity Tax Burdens. **AU** Hines, James R., Jr.; Lubke, Theodore J.; Hlinko, John C.

AA Hines: Harvard University and National Bureau of Economic Research. Lubke and Hlinko: Harvard University. SR National Bureau of Economic Research Technical Paper: 138; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. PG not available. PR $2.00. JE H22. KW Commodity Taxes. Tax Incidence.

AB This paper examines the incidence of commodity taxes, finding that, when demand and marginal cost schedules are linear, the burden of commodity taxation is distributed between buyers and sellers so that each suffers the same percentage reduction on pre-tax surplus. This equiproportionate reduction in surplus is the outcome of commodity taxes set at any rate, and is unaffected by relative demand and supply elasticities. Hence, when demand and marginal cost schedules are linear, commodity taxes resemble flat-rate taxes imposed on market surplus. Similar results apply to nonlinear schedules with certain ranges.

Hirono, Keiko Nosse
TI Efficiency of the Tokyo Housing Market. AU Ito, Takatoshi; Hirono, Keiko Nosse.

Hlinko, John C.
TI From Each According to His Surplus: Equi-Proportionate Sharing of Commodity Tax Burdens. AU Hines, James R., Jr.; Lubke, Theodore J.; Hlinko, John C.

Holden, Steinar
TI Ratifying Quorum and Bargaining Power. AU Haller, Hans H.; Holden, Steinar.

Holdsworth, David G.
PD May 1993. TI Is Consolidation Compatible with Competition? The New York and New Jersey Experience. AA Federal Reserve Bank of New York. SR Federal Reserve Bank of New York Research Paper: 9306; Research Department - Room 901, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. PG 30. PR no charge. JE G21, G28, L40. KW Antitrust Policy. Banking. Excess Capacity.

AB Originally written as part of a study on excess capacity, this paper assumes that further consolidation of the banking industry is desirable; nevertheless, regulators are still required to administer the antitrust laws to maintain competitive markets. Since 1969, consolidation in the Second Federal Reserve District has been facilitated by liberalization of the bank structure laws and by the evolution of antitrust enforcement methodology, including the enlargement of banking markets. After briefly reviewing these developments the paper examines trends in market structure in New York and New Jersey to determine the impact of structure regulation and its effects on both large and small banking organizations. Among the conclusions are that most markets are still highly competitive despite considerable consolidation. Reduced barriers to entry and the current relaxed stance of antitrust administration will permit further consolidation.

Hong, Yongmiao
TI M-Testing Using Finite and Infinite Dimensional Parameter Estimators. AU White, Halbert; Hong, Yongmiao.

Hooyman, Catharina J.
PD August 1993. TI The Use of Foreign Exchange Swaps by Central Banks: A Survey. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/93/64; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE E58, E52, G15, F33. KW Foreign Exchange Swaps. Domestic Liquidity. Foreign Exchange Reserves.

AB The paper discussed the use of foreign exchange swaps by central banks. Such use has aimed at affecting domestic liquidity, managing foreign exchange reserves, and stimulating domestic financial markets. It discusses these different uses and presents evidence for a selected group of countries. The paper cautions about the use of foreign exchange swaps to defend a particular exchange rate at a time when foreign exchange reserves are under pressure. It notes, finally, that use of foreign exchange swaps by central banks has been losing importance.

Hoynes, Hillary Williamson
PD July 1993. TI Welfare Transfers in Two-Parent Families: Labor Supply and Welfare Participation Under AFDC-UP. AA University of California, Berkeley and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4407; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 33. PR $5.00. JE I30, I38. KW Welfare. AFDC-UP. Labor Supply.

AB This paper examines the effect of cash transfers and food stamp benefits on family labor supply and welfare participation among two-parent families. The Aid to Families with Dependent Children-Unemployed Parent Program has been providing cash benefits to two-parent households since 1961 and recent congressional action has increased its importance. In this model, the husband's and wife's labor supply decisions are constrained by a family budget constraint which is non-convex due to features of the AFDC-UP program. The husband's and wife's labor supply decisions are restricted to no work, part-time work and full-time work. Features of the tax and transfer programs are modeled formally using kinked budget restraints. Maximum likelihood techniques are used to estimate parameters of the underlying hours of work and welfare participation equations. The estimates from the model are used to determine the magnitude of the work disincentive effects of the AFDC-UP program, and to simulate the effects of changes in AFDC-UP benefit and eligibility rules on family labor supply and welfare participation. The results suggest that labor supply and welfare participation among two-parent families are highly responsive to changes in the benefit structure under the AFDC-UP program.

Hsu, S.
TI Focal Points and Bargaining. AU Binmore, Ken; Swierzbinski, J.; Hsu, S.; Proulx, C.

Hughes, Alan
TI The Changing Structure of Competitive Industry in the 1980's. AU Dunne, Paul; Hughes, Alan.

Hughes, Joseph P.
PD June 1993. TI Accounting for the Demand for Financial Capital and Risk-Taking in Bank Cost Functions. AU Hughes, Joseph P.; Mester, Loretta J. AA Hughes: Rutgers University. Mester: Federal Reserve Bank of

Philadelphia and University of Pennsylvania. SR Federal Reserve Bank of Philadelphia Research Working Paper: 93-17; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. PG 22. PR no charge except overseas airmail, $2.00; checks/money orders in U.S. funds payable to Federal Reserve Bank of Philadelphia. JE G21, D81, D21. KW Capital Level. Risk Behavior. Banks.

AB We extend the model of Hughes and Mester (1993) to allow a bank's choice of its financial capital level to reflect its preference for return versus risk. A multiproduct cost function, which incorporates asset quality and the risk faced by a bank's uninsured depositors, is derived from a model of utility maximization. The utility function represents the bank management's preferences defined over asset levels, asset quality, capital level, and profit. Endogenizing the bank's choice of capital level in this way permits the demand for financial capital to deviate from its cost-minimizing level. The model consists of the cost function, share equations, and demand for financial capital equation, which are estimated jointly. We examine the characteristics of the cost function, e.g., scale and scope economies, to see how they differ from those of previous studies that did not permit non-cost-minimizing levels of capital.

Inman, Robert P.

PD July 1993. TI Presidential Leadership and the Reform of Fiscal Policy: Learning from Reagan's Role in TRA 86. AA University of Pennsylvania and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4395; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG not available. PR $5.00. JE E62, H11, H21, D72, D73. KW Fiscal Policy. Congressional Decisions. President Reagan.

AB The institutions of federal fiscal-policy making seem incapable of confronting the central domestic issues of the day. This paper presents a model of congressional decision-making in which legislators' incentives are contrary to fiscal efficiency. In such an environment, a "strong" president may be able to lead congress away from inefficient budgets. The paper specifies a model of what constitutes a strong president, namely president with resources to build congressional coalitions and a credible veto to force "all-or-nothing" choices between reform and the inefficient status quo. President Reagan's role in the passage of the Tax Reform Act of 1986 is detailed in the light of this model; the analysis reveals the role of executive resources and the importance of the veto strategy to major fiscal reform.

Ioannides, Yannis M.

TI Moving Behavior, Housing Market Reform and Growth. AU Hardman, Anna M.; Ioannides, Yannis M.

TI A Note on the Dual Approach to the Existence and Characterization of Optimal Consumption Decisions Under Uncertainty and Liquidity Constraints. AU Hajivassiliou, Vassilis; Ioannides, Yannis M.

TI Strategic Choice of Market Contacts. AU Haller, Hans H.; Ioannides, Yannis M.

TI The Dynamics of Housing Prices: An International Perspective. AU Englund, Peter; Ioannides, Yannis M.

Isard, Peter

TI Resource Allocation During the Transition to a Market Economy: Policy Implications of Supply Bottlenecks and Adjustment Costs. AU Aizenman, Joshua; Isard, Peter.

Issler, Joao Victor

TI Common Trends and Common Cycles in Latin America. AU Engle, Robert F.; Issler, Joao Victor.

Ito, Takatoshi

PD June 1993. TI Efficiency of the Tokyo Housing Market. AU Ito, Takatoshi; Hirono, Keiko Nosse. AA Ito: National Bureau of Economic Research. Hirono: Hitotsubashi University. SR National Bureau of Economic Research Working Paper: 4382; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 30. PR $5.00. JE R31, C81. KW Investment Properties. Real Estate. Housing Prices.

AB In analyzing the dynamics of Tokyo housing prices, we have compiled annual micro data sets from individual listings in a widely-circulated real estate advertising magazine. A data set compiled from "properties for investment" lists both asking (sales) prices and rents for the same properties. With such data, a price-rent ratio is directly observable and expected capital gains before tax and commissions found to be just less than 90% in ten years. The "repeatedly-listed properties for investment" data set, a subset of the first, contains only those units in the same buildings after a one-year interval. In this data set, price, rent, and ex post capital gains are all observable. They are used to show that ex post returns on housing investment in the last four years were actually rather modest. The data sets for "housing for sale" and "housing for rent" sections were separately used for hedonic regressions, from which we constructed hedonic price and rent indexes. These regressions show the effects of various determinants of housing prices and rents.

Iyer, Sridhar

PD July 1993. TI Time-Varying Term Premia and the Behavior of Forward Interest Rate Prediction Errors. AA University of Delaware. SR University of Delaware Department of Economics Working Paper: 93-05; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. PG 16. PR not available. JE E43, D84. KW Expectations Hypothesis. Term Premium.

AB Most empirical studies of the expectations hypothesis using U.S. interest rate data reject it. The rejection has generally been attributed to: (a) a time-varying expected term premium, or (b) expectation errors by market participants. This paper examines the term premium argument for the failure of the hypothesis. A Kalman filter technique is used to obtain estimates of the expected term premia from forward rate prediction errors of the one-month ahead three, four, five, and six-month Treasury bill rates over the period February 1964 to December 1986. Then the behavior of the term premium is analyzed. Results from estimation show that the term premium is important in explaining the behavior of the prediction errors. Most of the variation in the extracted expected term premium is random and unsystematic.

Jaditz, Ted

PD May 1993. TI Non-Linearity in the Interest Rate Risk

Premium. **AU** Jaditz, Ted; Sayers, Chera L. **AA** Jaditz: Bureau of Labor Statistics. Sayers: University of Houston. **SR** Bureau of Labor Statistics Working Paper: 242; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, D.C. 20212. **PG** 29. **PR** no charge. **JE** C14, C22. **KW** Prediction. Near Neighbor Regression. Forecasting.

AB We use nearest neighbor methods to predict movements in the interest rate risk premium. If one tries to model the spread with standard linear time series models, diagnostic tests indicate significant dependence in the model residuals. We attempt to exploit this dependence to improve out of sample forecasting of the level of the series. Examples show that nearest neighbor prediction may be a useful diagnostic to identify the processes which exhibit non-linearities in level. However, we find that our nonlinear methods deliver insignificant improvements in forecasts of the risk premium Thus it is unlikely that the data generator is, for example, a simple nonlinear deterministic process with additive noise.

Jaffe, Adam B.

TI How High are the Giants' Shoulders: An Empirical Assessment of Knowledge Spillovers and Creative Destruction in a Model of Economic Growth. **AU** Caballero, Ricardo J.; Jaffe, Adam B.

Jelassi, Tawfik

TI DSS Research and Practice in Perspective. **AU** Angehrn, Albert A.; Jelassi, Tawfik.

Johnson, David S.

PD January 1993. **TI** Estimating Unique Equivalence Scales. **AU** Johnson, David S.; Garner, Thesia I. **AA** Bureau of Labor Statistics. **SR** Bureau of Labor Statistics Working Paper: 239; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, D.C. 20212. **PG** 41. **PR** no charge. **JE** D60. **KW** Equivalence Scales. Economic Welfare.

AB Poverty measures and other public policy instruments often rely on equivalence scales to make interpersonal comparisons of well-being. By equating measures of economic welfare across households with different characteristics, equivalence scales are used to adjust poverty lines by family size. While the scales implicit in the U.S. poverty thresholds use the household's food share as a measure of economic welfare, we estimate utility-based equivalence scales, which equate households' actual welfare as determined by a utility function. Recently, these utility-based scales have been determined by estimating translog and almost ideal demand systems. In this paper, we use the same data set to compare the scales arising form these different models. In addition, we discuss the problems with using utility-based scales. Since utility-based scale may change with the reference level of utility, we use the results of Blackorby and Donaldson(1991) and Lewbel(1989) to identify unique equivalence scales.

Johnston, R. Barry

PD October 1993. **TI** Aspects of the Design of Financial Programs with the Adoption of Indirect Monetary Controls. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/93/16; International Monetary Fund, Washington, DC 20431. **PG** 19. **PR** not available. **JE** E51, E52.

KW Financial Programming. Indirect Monetary Controls.

AB This paper examines why the framework for financial programs may need to be reassessed with the transition from direct to indirect monetary controls. Because the controllability of broader monetary and credit aggregates with indirect monetary controls is likely to be imprecise, quantitative financial programming at the level of the banking or financial system may not be practicable with the transition to indirect monetary controls. Financial programming on the central bank's balance sheet has a number of operational advantages with the adoption of indirect monetary controls, and also a broader economic rationale.

Jonung, Lars

TI The Common Development of Institutional Change as Measured by Income Velocity: A Century of Evidence from Industrialized Countries. **AU** Bordo, Michael D.; Jonung, Lars; Siklos, Pierre L.

Jullien, Bruno

TI Competing Vertical Structures: Precommitment and Renegotiation. **AU** Caillaud, Bernard; Jullien, Bruno; Picard, Pierre.

Kahn, Charles M.

TI Universal Coalition-Proof Equilibrium: Concepts and Applications. **AU** Chakravorti, Bhaskar; Kahn, Charles M.

Kahneman, Michael

TI Communication in Repeated Games with Private Monitoring. **AU** Ben-Porath, Elchanan; Kahneman, Michael.

Kaneko, Mamoru

PD April 1992. **TI** On Behavior Strategies, Mixed Strategies and Perfect Recall: Part I. **AU** Kaneko, Mamoru; Kline, J. Jude. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E92-06; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** not available. **PR** no charge. **JE** C70, D83. **KW** Perfect Recall. Information Partitions.

AB In this two part paper, we consider the relationship between behavior and mixed strategies with respect to realization equivalence, and also consider the role of the perfect recall condition on information partitions. In Part I, we consider some information contained in strategies that is additional to what an information partition describes when it does not satisfy the perfect recall condition. It is shown that the information partition refined by such additional strategic information leads to the perfect recall condition. We prove that the perfect recall condition is necessary and sufficient for the information partition to represent all information strategies contained. Several results on the relationship between Nash equilibria in behavior and mixed strategies are discussed. In Part II, we explore the structure of classes of information partitions having equivalent mixed strategy spaces with respect to realization equivalence.

PD April 1992. **TI** On Behavior Strategies, Mixed Strategies and Perfect Recall: Part II. **AU** Kaneko, Mamoru; Kline, J. Jude. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State

AB This is a sequel to our exploration of behavior strategies, mixed strategies and perfect recall. In this paper we compare the full informational contents of information partitions in combination with mixed strategies. The notion of II-equivalence on information partitions is used for this comparison. II-equivalence means that information partitions have the same pure strategy spaces with respect to realization equivalence, and consequently, the same mixed strategy spaces. The notion of inflations, introduced by Dalkey (1953), is useful for the consideration II-equivalence. A II-equivalence class of information partitions having an information partition with the perfect recall condition is used to answer the question, raised in Part I, of when the additional information contained in the mixed strategy space compensates fully for the lack of perfect recall. We give several characterizations of such a class.

AB In this paper we consider two models of n-person bargaining problems where disagreement points are endogenously chosen. The first model is a direct extension of Nash's (1953) variable threat bargaining model. In the second model, a disagreement point is given as a Nash equilibrium of the underlying noncooperative game. These models are formulated as extensive games. We provide axiomatizations of solutions for them, which are based on Nash's axiomatic approach to his bargaining solution but are of a non-cooperative nature--the Pareto Optimality Axiom is replaced by a Subgame Perfectness Axiom. We show that for games with more than two players, the equilibrium threats do not necessarily determine unique equilibrium payoffs. We also show that for large bargaining games with sidepayments, any equilibrium threat point becomes approximately a Nash equilibrium in the underlying non-cooperative game, and vice versa. This result suggests that the difference between the two models becomes insignificant when the number of players is large.

AB In this paper we argue that the common knowledge concept cannot fully be defined in finitary logics. Its explicit (direct) definition needs an infinitary logic, but an implicit definition might be possible in a finitary logic. We formulate requirements for the possibility of an implicit definition of the common knowledge concept, and then show that these requirements cannot be fulfilled by any set of axioms. We use propositional epistemic logic (S4) with the knowledge operators to two players to show this claim. This claim holds, however, for other finitary logics such as (S5), (M) and the finitary versions of Kaneko-Nagashima's game logics. The claim is proved using the cut-elimination theorem for (S4) in Gentzen-style sequent calculus. We prove another theorem, which is a modification of Beth's definability theorem in (S4), and provides a strong side evidence for the indefinability of common knowledge.

Karp, Larry S.

AB The strategic effects of subsidies on output and subsidies on investment differ substantially in dynamic models where a government's commitment ability is limited. Output subsidies remain effective even as the period of commitment vanishes, but investment subsidies may become completely ineffective. This difference has been obscured because most existing models of strategic trade policy are static.

AB If a durable good monopolist produces at constant marginal costs and the good depreciates, there exists a family of Strong Markov Perfect Equilibrium (SMPE) with an infinitesimal period of commitment. One member of this family entails instantaneous production of the level of stock produced in a competitive equilibrium; this is consistent with the Coase Conjecture. Other SMPE in the family entail steady-state production at a stock level lower than in the competitive equilibrium. In these equilibria there may be a jump to the steady state, or the steady state may be approached asymptotically. Monopoly profits are positive in these equilibria, and the Coase Conjecture fails. We contrast this result to other papers which use non-Markov strategies to construct multiple equilibria.

Keeble, David

Kim, Dongcheol

King, Maxwell L.
TI   Testing for Subblock Effects in Multi-Stage Linear Regression Models. AU   Bhatti, M. Ishaq; King, Maxwell L.

Kinnaman, Thomas C.
TI   Garbage, Recycling, and Illicit Burning or Dumping. AU   Fullerton, Don; Kinnaman, Thomas C.

Klein, Michael W.
PD   June 1993. TI   Timing Is All: Elections and the Duration of United States Business Cycles. AA   Tufts University and National Bureau of Economic Research. SR   National Bureau of Economic Research Working Paper: 4383; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG   not available. PR $5.00. JE   E32, D72. KW   Political Business Cycles. Turning Points.
AB   Political business cycle theories predict that the occurrence and outcome of elections affect the timing of business cycle turning points. Opportunistic political business cycle theory predicts that a contraction is more likely to end soon after an election than at other times. Rational partisan political business cycle theory predicts differences in the likelihood of the end of an expansion after an election depending upon the party of the newly-elected president. This paper directly tests the effect of elections on the turning points of the United States business cycle during analysis. The prediction that a contraction is more likely to end in the period before an election than in other periods is not supported by our empirical results. There is significant evidence, however, that an expansion is significantly more likely to end after the election of a Republican president but not after the election of a Democratic president in the post-World War I and post-World War II periods. This is consistent with the predictions of rational partisan political business cycle theory.

Kline, J. Jude
TI   On Behavior Strategies, Mixed Strategies and Perfect Recall: Part I. AU   Kaneko, Mamoru; Kline, J. Jude.

TI   On Behavior Strategies, Mixed Strategies and Perfect Recall: Part II. AU   Kaneko, Mamoru; Kline, J. Jude.

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.

Konishi, Toru
PD   November 1992. TI   Separation in Cointegrated Systems. AU   Konishi, Toru; Granger, C. W. J. AA   University of California, San Diego. SR   University of California, San Diego Department of Economics Working Paper: 92-51; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. PG   30. PR $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. JE   C32, C22, C12. KW   Cointegration. Causality. Long-Run Neutrality.
AB   In macroeconomics, two groups of variables often are said not to affect each other in the long run despite the existence of causality in the short run. This paper proposes three testing procedures for such a hypothesis for I(1) variables

based on likelihood-based cointegration testing procedure developed by Johansen (1988).

Kramarz, F.
PD   June 1993. TI   When Repeated Cheap-Talk Generates a Common Language. AA   INSEE. SR   Unite de Recherche Document de Travail ENSAE/INSEE: 9328; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris Cedex 14, FRANCE. PG   15. PR   no charge. JE   C72, C73, D83. KW   Cheap Talk. Common Interest.
AB   In this article, we study the emergence of a common language in repeated Sender-Receiver games when the messages have no common meaning before the game starts. We prove that such a common understanding of the messages is endogenously generated if and only if the game is a game of common interests.

Krcmar, Helmut
PD   not available. TI   EDI in Europe - Empirical Analysis of a Multi-Industry Study. AU   Krcmar, Helmut; Bjorn-Andersen, Niels; Eistert, Torsten; Griese, Joachim; Jelassi, Tawfik; O'Callaghan, Ramon; Pasini, Paolo; Ribbers, Peter. AA   Krcmar and Eistert: Hohenheim University. Bjorn-Andersen: Copenhagen Business School. Griese: Bern University. Jelassi: INSEAD. O'Callaghan: IESE, Barcelona. Pasini: SDA Bocconi. Ribbers: Tilburg University. SR   INSEAD Working Papers: 93/28/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG   14. PR   not available. JE   O33, M11, D21. KW   Information Technology. Communication Technology. Electronic Data Interchange.
AB   The use of information and communication technology to support information exchanges has been constantly growing over the last decade. A major focus of interest centers around the exchange of structured information between companies, generally referred to as "Electronic Data Interchange". The strategic importance of the use of EDI is often stated. It is therefore not surprising to find EDI as a major managerial concern, both from a technological and competitive point of view. There is a growing debate whether the use of EDI just improves the efficiency of operations or really delivers competitive advantages. A differentiated analysis is necessary in order to analyze these issues to advance the understanding of the impact of EDI (Klein 1992, Benjamin et al. 1990, Pfeiffer 1991). Careful company and industry-specific analysis is needed to determine the impact of EDI.

Kroon, Leo G.
TI   Planning KLM's Aircraft Maintenance Personnel. AU   Van Wassenhove, Luk N.; Van Nunen, J.; Dijkstra, Matthijs C.; Kroon, Leo G.; Salomon, Marc.

TI   Planning KLM's Aircraft Maintenance Personnel. AU   Van Wassenhove, Luk N.; Van Nunen, J.; Dijkstra, Matthijs C.; Kroon, Leo G.; Salomon, Marc.

Krupnick, Alan J.
TI   Toward An Integrated Theory of Open Economy Environmental and Trade Policy. AU   Panagariya, Arvind; Palmer, Karen; Oates, Wallace E.; Krupnick, Alan J.

Kuik, Roelof
PD   April 1993. TI   Batching Decisions: Structure and

Models. AU Kuik, Roelof; Salomon, Marc; Van Wassenhove, Luk N. AA Kuik and Salomon: Erasmus University. Van Wassenhove: INSEAD. SR INSEAD Working Papers: 93/31/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 16. PR not available. JE M11, D92. KW Lotsizing. Inventories.
AB Batching decisions are one of management's instruments to impact performance of goods-flows systems. There is a vast body of literature on analysis and modeling of batching. This paper aims to provide a structure for batching decisions that can help in positioning batching research and models with respect to issues pertinent to goods-flow management. The basis of the structure is a distinction of batching issues as related to three decision levels: (i) process choice/design, (ii) activity planning (aggregate planning and activity programming), and (iii) activity control. Furthermore, the paper discusses some often heard criticisms of batching analysis. The paper concludes with a little speculation of the authors on the future directions of batching research.

Kumar, Manmohan S.
PD September 1993. TI An Extended Scenario and Adjustment Model for Developing Countries. AU Kumar, Manmohan S.; Samiei, Hossein; Bassett, Sheila. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/93/73; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 36. PR not available. JE C51, E17, O11, E63. KW Developing Countries. Macroeconomic Model.
AB This paper discusses three important extensions to the developing country scenario and adjustment model used in the World Economic Outlook exercises. First, the model is augmented to include fiscal and monetary sectors and now explicitly captures links among government policy, investment, output and inflation. Second, the external sector is modified to allow domestic demand factors to influence imports, as well as allowing flexibility in the financing of imports. Third, the model system is extended to the group of net-creditor countries, and for the oil exporters within this group, oil exports are modeled separately. The revised model is estimated for each of the 95 developing countries and parameter estimates for each of the main equations are presented. The paper also reports the results of four simulation exercises to illustrate how the new model system may be used to quantify the effects of changes in domestic policies and in the external environment.

Labadie, Pamela
TI Identifying Monetary Policy With a Model of the Federal Funds Rate. AU Gilles, Christian; Coleman, John; Labadie, Pamela.

Laffargue, Jean-Pierre
TI Dynamique des taux de change a l'interieur du SME. AU Avouyi-Dovi, Sanvi; Laffargue, Jean-Pierre.

Laixuthai, Adit
TI Effects of Alcohol Price Policy on Youth. AU Grossman, Michael; Chaloupka, Frank J.; Saffer, Henry; Laixuthai, Adit.

Lajeri, Fatma
PD March 1993. TI Risk Aversion and Prudence: The Case of Mean-Variance Preferences. AU Lajeri, Fatma;

Nielsen, Lars Tyge. AA INSEAD. SR INSEAD Working Papers: 93/21/FIN/EP; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 40. PR not available. JE D81. KW Mean-Variance Model. Risk Premia. Expected Utility.
AB This paper studies the concepts of risk aversion and prudence in the mean-variance model and relates them to the corresponding concepts in the expected-utility model. The concepts of risk premia and precautionary premia have their counterparts in this framework and can be represented graphically in an intuitive fashion. We show that there is an isomorphic relationship between the concept of prudence and the concept of risk aversion in the mean-variance framework. We define the conditions under which a utility function is more risk averse (more prudent) than another one and the conditions under which a utility function exhibits increasing, decreasing and constant risk aversion (prudence). In the particular case of mean-variance preferences derived from expected utility and normal distributions, we show that utility is concave as a function of variance and mean if and only if it exhibits decreasing prudence.

Lang, Larry H. P.
PD June 1993. TI Tobin's Q, Corporate Diversification and Firm Performance. AU Lang, Larry H. P.; Stulz, Rene M. AA Lang: New York University. Stulz: Ohio State University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4376; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 37. PR $5.00. JE D92, L22, L21. KW Firm Diversification.
AB In this paper, we show that Tobin's q and firm diversification are negatively related. This negative relation holds for different diversification measures and when we control for other known determinants of q. We show further that diversified firms have lower q's than equivalent portfolios of specialized firms. This negative relation holds throughout the 1980's in our sample. Finally, it holds for firms that have kept their number of segments constant over a number of years as well as for firms that have not. In our sample, firms that increase their number of segments have lower q's than firms that keep their number of segments constant. Our evidence is consistent with the view that firms seek growth through diversification when they have exhausted internal growth opportunities. We fail to find evidence supportive of the view that diversification provides firms with a valuable intangible asset.

Laroque, G.
PD May 1993. TI Macroeconometric Disequilibrium Models. AU Laroque, G.; Salanie, B. AA Laroque: INSEE. Salanie: ENSAE. SR Unite de Recherche Document de Travail ENSAE/INSEE: 9333; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 25. PR no charge. JE C51, C34, E13. KW Macroeconomics. Disequilibrium.
AB Since the beginning of the 1980's, there has been a continuing research effort in the specification and estimation of macroeconometric models where prices and wages are not assumed to instantaneously clear all markets. The present paper aims at reviewing the main advances of the applied literature. The present paper aims at reviewing the main advances of the applied literature. The paper focuses on what we believe to be

the two major problems that the literature has tried to tackle in the past ten years: aggregation and the dynamics of prices.

TI Private Information and the Design of Securities.
AU Demange, G.; Laroque, G.

Latham, William
TI The Regulation of Telecommunications and State Economic Growth. **AU** Bottorff, Peggy; Latham, William; Stapleford, John.

Le Breton, Michel
PD August 1993. **TI** Strategy-Proof Social Choice with Continuous Separable Preferences. **AU** Le Breton, Michel; Weymark, John A. **AA** Le Breton: G.R.E.Q.E. and Universite d'Aix Marseille II. Weymark: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 93-29; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. **PG** 56. **PR** **JE** D71. **KW** Social Choice. Separable Preferences.
AB We consider a strategy-proof social choice function f defined on a domain of continuous separable preference profiles. The set of alternatives is assumed to be the product of first-countable Tychonoff spaces, with each component containing at least three alternatives. We show that if f if strategy-proof and has a full range, then there is a dictator for each component, but different components may have different dictators. In addition, we show that if f is also required to choose Pareto optimal outcomes, then a single individual must be the dictator on all components.

Lee, Gary G. J.
TI A Permanent and Transitory Component Model of Stock Return Volatility. **AU** Engle, Robert F.; Lee, Gary G. J.

Lee, William
TI Federal Reserve Operating Procedures and Institutional Change. **AU** Wenniger, John; Lee, William.

Leite, Sergio Pereira
TI Enterprise Arrears in Russia: Causes and Policy Options. **AU** Bigman, David; Leite, Sergio Pereira.

Lemieux, Thomas
TI Wage Dispersion, Returns to Skill, and Black-White Wage Differentials. **AU** Card, David; Lemieux, Thomas.

Leone, Alfredo M.
PD September 1993. **TI** Institutional and Operational Aspects of Central Bank Losses. **AA** International Monetary Fund. **SR** International Monetary Fund Papers on Policy Analysis and Assessment: PPAA/93/14; International Monetary Fund, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E58. **KW** Monetary Control. Central Banks. Latin America.
AB This paper deals with the problem of central bank losses that has emerged in several developing countries. At times, they have created problems in the effective design and implementation of IMF programs because of large and unexpected or unexplained movements in "other assets net" in the balance sheet of central banks. The paper shows that these losses have reached significant magnitude in several Latin American countries, explores their causes and consequences for monetary programming and control, discusses ways to identify and measure them, and suggests ways to restore the profitability of central banks incurring losses while increasing the transparency of the public sector accounts.

LeRoy, Stephen F.
TI Stochastic Bubbles in Markov Economies. **AU** Gilles, Christian; LeRoy, Stephen F.

Levenstein, Margaret
PD July 1993. **TI** Vertical Restraints in the Bromine Cartel: The Role of Distributors in Facilitating Collusion. **AA** University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 49; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** L13, L14, L42, N61. **KW** Entry Deterrence. Cartels.
AB From 1885 to 1902 manufacturers and distributors in the American bromine industry cooperated to increase prices and profits. Like many sectors of the American economy at the time, the bromine industry was made up of a large number of small manufacturers and a small number of national distributors. The manufacturers agreed to pool their output and sell only to two distributors. The distributors accumulated excess inventories rather than let the market price fall, but then used those inventories as a threat to deter cheating and new entry. Industry participants designed contracts to balance fluctuations in the costs and benefits from cheating. These contracts succeeded in stabilizing collusion until the entry of new, vertically integrated, mass production firm led to its demise.

PD September 1993. **TI** Price Wars and the Stability of Collusion: A Study of the Pre-World War I Bromine Industry. **AA** University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors in Long Run Growth: 50; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $5.00. **JE** N61, L13. **KW** Cartels. Price Wars. Imperfect Monitoring.
AB Bromine producers colluded to raise prices and profits during most of the period between 1885 and 1914. Collusion was punctuated by price wars in which prices fell sharply. The characteristics of these price wars are compared with those in the Green-Porter and Abreu-Pearce-Stachetti models. Some of the bromine price wars resulted from the imperfect monitoring problems in these models. Those price wars were short and mild. More severe price wars were part of a bargaining process, in which firms tried to force a renegotiation to a new collusive equilibrium with a different distribution of rents.

Levine, David K.
PD June 1992. **TI** Debt Constraints and Equilibrium in Infinite Horizon Economies with Incomplete Markets. **AU** Levine, David K.; Zame, William R. **AA** Levine: University of California, Los Angeles. Zame: Johns Hopkins University. **SR** University of California at Los Angeles Department of Economics Working Paper: 703; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. **PG** 35. **PR** $5.00.

AB This paper defines the notion of finitely effective equilibrium and pseudo-equilibrium for infinite horizon economies with incomplete asset markets. This notion generalizes the usual ones for finite horizon economies with incomplete markets and for infinite horizon economies with complete markets. Finitely effective pseudo-equilibria exist when assets are short-lived and denominated in general commodity bundles; true equilibria exist when assets are denominated solely in a single numeraire commodity, or in units of account. It is shown that the notion of finitely effective equilibrium coincides with two other notions of equilibrium: equilibrium with loose, consistent debt constraints and equilibrium with bounded debt.

Lewis, Karen K.

AB The relationship between foreign exchange intervention and monetary policy underlies the question of whether sterilized interventions can affect the exchange rate. In this paper, I examine this relationship using data on U.S. foreign exchange interventions from 1985 to 1990, recently made publicly available. I examine whether interventions could be viewed as "signaling" changes in future monetary policy variables. I also consider whether changes in monetary policy may induce interventions in an effort to "lean against the wind" of exchange rate movements. Interestingly, I find evidence both that interventions help predict monetary policy variables, and that monetary variables help predict interventions. These relationships matter for understanding exchange rate behavior only if monetary variables indeed affect the exchange rate. Therefore, I also study the response of exchange rates to shocks in various monetary policy variables. The results provide new evidence on the relationship between exchange rates, monetary policy, and foreign exchange interventions.

Lieb, Robert C.

AB A comparison of third party logistics services utilization between large manufacturing firms in the United States and Western Europe is provided. All of these firms had been utilizing third party providers for at least three years, although many had been doing so five years or longer. The group of Western European firms are more committed to outsourcing, as evidenced by the substantially greater percentage of their total corporate logistics budget allocated to third party firms. The strategic decision to utilize third party companies is more often made at the corporate level and includes input more frequently from other functional areas in Western European firms. However, many of the findings indicate that the issues faced by both groups of executives are very similar, such as their reservations to outsourcing and their experiences with implementation. Almost all of the executives indicated they are satisfied with the performance of their third party providers, and would at least moderately increase their use of such firms.

Linton, Oliver

AB We construct efficient estimators of the identifiable parameters in a regression model when the errors follow a stationary parametric ARCH (P) process. We do not assume a functional form for the conditional density of the errors, but do require that it be symmetric about zero. The estimators of the parameters are adaptive in the sense of Bickel. The ARCH parameters are not jointly identifiable with the error density. We consider a reparameterization of the variance process and show that the identifiable parameters of this process are adaptively estimable.

Liu, Lihong

Lollivier, S.

Lu, Kevin

Lubke, Theodore J.

Lucas, Robert E. Jr

Luporini, Annalisa

KW Principal-Agent Model. Farming.
AB In this paper we use the multi-task principal-agent methodology of Holmstrom and Milgrom (1990) to study a seminatural sharecropping economy with particular reference to the environment that was pervasive in Central Italy for more than five centuries, from the XIV century to the second half of the XX century. To capture the feature that the economy has limited interactions with the market we distinguish between subsistence crops and cash crops and we introduce a Self-Sustainability Constraint. This constraint models the requirement that the entire amount of the subsistence crop to sustain the tenants is to be produced within each farming unit. The analysis of the spillover effect from one crop to the other allows us to show that this constraint reduces the ability of a seminatural sharecropping economy to adjust to a changed environment -- a factor which is at the root of the replacement of the sharecropping system.

Luttmer, Erzo
TI Econometric Evaluation of Asset Pricing Models.
AU Hansen, Lars Peter; Luttmer, Erzo; Heaton, John.

Lutz, Nancy A.
PD January 1993. TI The Economic Theory of Warranties. AA Virginia Polytechnic Institute and State Institute. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E93-06; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE L14, D83. KW Warranty. Guarantees.
AB This paper surveys economic theories about factors affecting manufacturers choice of warranty. Prepared for The Product Warranty Handbook, edited by W. R. Blischke and D. N. P. Murthy.

PD March 1993. TI Why Do We Observe Minimal Warranties? AU Lutz, Nancy A.; Padmanabhan, V. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E93-07; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE L14, D83, D81. KW Warranty. Guarantees.
AB Why is it that some products carry a minimal manufacturer base warranty even though all consumers are risk-averse? Conventional wisdom suggests that it is profitable for the manufacturer to offer comprehensive warranties in this setting. We provide in this paper an explanation for the provision of minimal warranty in markets where all consumers are risk-averse. Minimal warranties are created by the impact of consumer moral hazard and competition in the insurance after-market for the product. We show that consumers who purchase optional extended warranties from an independent provider of insurance create a significant negative externality on the warranty redemption costs of the manufacturer. This in turn creates a significant erosion in the manufacturer's profits from warranty insurance. Consequently, it is in the best interest of the manufacturer to drop the level of warranty coverage provided with the product. This intuition holds for homogeneous as well as heterogeneous markets of consumers.

Machin, Stephen
TI Trade Unions and the Dispersion of Earnings in U.K. Establishments 1980-90. AU Gosling, Amanda; Machin, Stephen.

Mairesse, J.
TI Exploring the Productivity of Research and Development in French Manufacturing Firms. AU Hall, Bronwyn H.; Mairesse, J.

Makridakis, Spyros
TI The Impact of Empirical Accuracy Studies on Time Series Analysis and Forecasting. AU Fildes, Robert; Makridakis, Spyros.

Mankiw, N. Gregory
TI Relative-Price Changes as Aggregate Supply Shocks.
AU Ball, Laurence; Mankiw, N. Gregory.

Mao, Wen
TI The n-person Nash Bargaining Problems with Variable Threats. AU Kaneko, Mamoru; Mao, Wen.

PD September 1992. TI Commitments to Threat Strategies in Nash Bargaining. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-26; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE C78. KW Bargaining Game. Commitment Choice.
AB Nash's two-person bargaining model consists of two stages: threat strategies and utility demands are chosen in the first and second stages respectively. Here players commit to play the threat strategies chosen in the first stage for the case where disagreement occurs in the second stage. Whether a player commits or not to play a threat strategy, however, is voluntary in principle. This leads to some possible extensions of Nash's model so that players' commitment choices are taken into account. In this paper, we consider three extensions. In the two person case, these three extensions give essentially the same result as that given by Nash. This is not the case for more than two players; the result depends upon an extension. In one extension, Nash's result always holds for more than two players. In the other two extensions, however, we give a three person example where not all players choose commitments in equilibrium.

Marini, Gianicarlo
PD January 1993. TI Public Debt and Redistribution.
AU Marini, Gianicarlo; Scaramozzino, Pasquale. AA Marini: Università di Sienna. Scaramozzino: University College, London. SR University College London Discussion Paper: 93-01; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 15. PR 3 pounds; checks payable to Dept. of Economics, UCL. JE E60, H60. KW Overlapping Generations. Inequality. Ricardian Equivalence.
AB This paper investigates the distributional implications of debt policy in an overlapping generations model with heterogeneous asset holders. The issue of debt to be repaid via future taxation redistributes resources from the less well off to the wealthier even for small degrees of wealth inequality if the pure rate of time preference is not too high.

Markowitz, Paul
TI Optimal Disclosure Delay in Multistage R&D Competition. **AU** Bloch, Francis; Markowitz, Paul.

Martinas, Katalin
TI Wealth Accumulation and Economic Progress. **AU** Ayres, Robert U.; Martinas, Katalin.

Martinez, Constantino
TI Optimal Management of Groundwater With Increasing Demand. **AU** Rubio, Santiago J.; Martinez, Constantino; Castro, Juan, P.

Matsuyama, Kiminori
TI Start-Up Costs and Pecuniary Externalities as Barriers to Economic Development. **AU** Ciccone, Antonio; Matsuyama, Kiminori.

Matungulu, Mbuyamu
TI Economic Trends in Africa (The Economic Performance of Sub-Saharan African Countries). **AU** Dhonte, Pierre; Clement, Jean; Matungulu, Mbuyamu; Rehm, Dawn.

Matyas, Laszlo
TI Panel Data Modelling: A Software Review. **AU** Blanchard, Pierre; Matyas, Laszlo.

PD June 1993. **TI** Linear Models for Panel Data. **AU** Matyas, Laszlo; Sevestre, P. **AA** Matyas: Monash University. Sevestre: University of Paris XII. **SR** Monash Department of Econometrics Research Working Paper: 6/93; Department of Econometrics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 32. **PR** no charge. **JE** C23, C63. **KW** Panel Data. Error Components Models. Fixed Effects Models.
AB One of the main changes in applied econometrics during the last twenty years has been the increasing use of panel data (i.e. data which consist of repeated observations on firms, households, sectors, regions, countries,...etc). Developments in economic theory are more and more based upon microeconomic models relying on individual agents' behaviors and their possible heterogeneity. Panel data thus offer a better framework to match both the level of analysis of these models and the data available. Specific econometric methods dealing with such data have progressed considerably. They allow advantage to be taken of the particular characteristics of the data in a more efficient way. The aim of this paper is to emphasize the benefits, for applied economists, in using panel data for studying firm and consumer behaviors and to present the most usual models and methods used for dealing with them in a linear context.

Mayer, Thomas
PD September 1993. **TI** Why is There so Much Disagreement Among Economists? **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-20; Department of Economics, University of California at Davis, Davis, CA 95616-8578. **PG** 16. **PR** $3.00 U.S. and Canada. $4.00 international. **JE** B40. **KW** Value Judgements.
AB Although economists do not disagree as much as is often claimed, still there is much disagreement. Seven factors that generate such disagreement are discussed here. These are the limited knowledge that economists have, their willingness to discuss just about all economic assumptions about matters outside of economics, and differences among economists in metaphysical cores, in value judgments, in social empathies and in methodology.

McCallum, Bennett T.
PD May 1993. **TI** Macroeconomics After Two Decades of Rational Expectations. **AA** Carnegie Mellon University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4367; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $5.00. **JE** D84, E32, C22, O40, E12. **KW** Real Business Cycles. Growth Theory. Sticky Prices.
AB This expository paper describes major developments during the second decade of rational-expectations macroeconomics, roughly 1982-1991. Topics attracting the most attention from researchers differed from those of 1972-1981, with considerable emphasis being devoted to technical matters. Here the discussion focuses on four prominent areas: real business cycle analysis, growth theory and its empirical application, issues involving unit roots in macroeconomic time series, and sticky-price models of aggregate supply. The paper concludes by arguing that the current state of knowledge in macroeconomics is not as bad as is often suggested.

PD May 1993. **TI** Unit Roots in Macroeconomic Time Series: Some Critical Issues. **AA** Carnegie Mellon University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4368; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 43. **PR** $5.00. **JE** C82, C22, C32. **KW** Difference Stationary. Trend Stationary. Cointegration.
AB This paper suggests that the relevant question concerning "unit roots" in the U.S. real GNP time series pertains to the relative importance of difference-stationary and trend-stationary components. Various analytical approaches indicate that an accurate answer is not obtainable with existing data. The paper next considers whether trending series should be differenced prior to use in regression analysis and suggests that it may not matter greatly if autocorrelated residuals are avoided. Finally, the paper argues that the absence of cointegration among variables does not imply the absence of any practically useful long-run relationship.

McCarthy, Jonathan P.
PD December 1992. **TI** An Empirical Investigation of Imperfect Insurance and Precautionary Savings Against Idiosyncratic Shocks. **AA** Federal Reserve Bank of New York. **SR** Federal Reserve Bank of New York Research Paper: 9219; Research Department - Room 901, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. **PG** 31. **PR** no charge. **JE** E21, D91, D81. **KW** Consumption Insurance. Precautionary Saving.
AB This paper extends previous work testing for perfect consumption insurance by splitting the sample into low- and high-wealth groups to look for precautionary saving behavior if insurance is imperfect. If consumers have declining absolute prudence and a precautionary demand for saving, then the marginal propensity to consume (MPC) out of idiosyncratic shocks to income is higher for low-wealth consumers than for high-wealth consumers. Using data from the 1984-1987 waves

of the PSID, I find that the MPC of the low-wealth group is higher than that of the high-wealth group. I also show that the data indicate that consumers do not hold part of their precautionary savings in the form of less liquid assets such as housing equity.

McClelland, Robert

TI An Improved Nonparametric Test for Misspecification for Functional Form. AU Bradley, Ralph; McClelland, Robert.

McFadden, Daniel

TI Living Arrangements: Health and Wealth Effects. AU Borsch-Supan, Axel; McFadden, Daniel; Schnabel, Reinhold.

McGuckin, Robert H.

PD August 1993. TI The Importance of Establishment Data in Economic Research. AA U.S. Department of Commerce, Bureau of the Census. SR Bureau of the Census Center for Economic Studies Discussion Paper: 93-10; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. PG 15. PR no charge. JE C81. KW Establishment. Microdata. Aggregation Bias. Data Access.

AB The importance and usefulness of establishment microdata for economic research and policy analysis is outlined and contrasted with traditional products of statistical agencies -- aggregate cross-section tabulations. It is argued that statistical agencies must begin to seriously rethink the way they view establishment data products.

McLaren, Keith R.

TI The Stochastic Specification of Demand Share Equations: Restricting Budget Shares to the Unit Simplex. AU Fry, Jane M.; Fry, Tim R. L.; McLaren, Keith R.

McLean, Richard P.

PD August 1992. TI Alternative Methods for Cost Allocation in Stochastic Service Systems. AU McLean, Richard P.; Sharkey, William W. AA McLean: Rutgers University. Sharkey: Bellcore. SR Bellcore Economics Discussion Paper: 81; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE D40. KW Cost Allocation. Pricing Rules. User Fees. Queuing Systems.

AB In this paper we consider the question of allocating costs and setting prices for customers in a variety of queuing systems. We will focus on the problem of setting user fees within an organization for a shared resource, such as a computer center. We argue that both the Aumann-Shapley pricing rule, and the pricing rule based on the Shapley value with a finite game, are appropriate cost allocation methodologies. These approaches allow us to explicitly determine prices for customers in queuing situations, who differ from one another in terms of their arrival rates, service rates, costs of lost work, and the number of simultaneous servers which they require.

PD not available. TI An Approach to the Pricing of Broadband Telecommunications Services. AU McLean, Richard P.; Sharkey, William W. AA McLean: Rutgers University. Sharkey: Bellcore. SR Bellcore Economics

Discussion Paper: 86; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE D46, D40, L96. KW Cost Allocation. Pricing Rules. Telecommunications.

AB In this paper we describe two cost allocation methodologies which may be used to determine prices for a regulated telecommunications supplier offering heterogeneous services on a broadband network. Both methodologies can be characterized by sets of plausible axioms, that one could argue should be satisfied by any pricing rule. One of the approaches leads to the Aumann-Shapley pricing rule, which is well known in the literature. The other approach leads to a pricing rule based on the Shapley value of a related cooperative game. While these approaches are similar in motivation, they differ in the technical requirements which must be imposed on the underlying cost function, and we argue that Shapley value pricing is more appropriate in a telecommunications context. We are able to explicitly determine Shapley value prices for customers who differ from one another in terms of their arrival rates, service rates, costs of low work, and the number of simultaneous channels which they require.

Mei, Jianping

TI Measuring International Economic Linkages with Stock Market Data. AU Ammer, John; Mei, Jianping.

Mered, Michael

TI Structural Adjustment, Economic Performance, and Aid Dependency in Tanzania. AU Nord, Roger; Mered, Michael; Agrawal, Nisha; Ahmed, Zafar.

Mester, Loretta J.

PD June 1993. TI Why Are Credit Card Rates Sticky? AA Federal Reserve Bank of Philadelphia and University of Pennsylvania. SR Federal Reserve Bank of Philadelphia Research Working Paper: 93-16; 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 E43, G21, D82. KW Consumer Credit. Cost of Funds. Interest Rate Ceilings.

AB This paper investigates credit card rate stickiness using a screening model of consumer credit markets. In recent years, while the cost of funds has fallen, credit card rates have remained stubbornly high, spurring legislators to consider imposing interest rate ceilings on credit card rates. The model incorporates asymmetric information between consumers and banks, regarding consumers' future incomes. The unique equilibrium is one of two types: separating (in which low-risk consumers select a collateralized loan and high-risk consumers select a credit card loan), or pooling (in which both types of consumers choose credit card loans). I show that a change in the banks' cost of funds can have an ambiguous effect on the credit card rate, so that the credit card rate need not fall when the cost of funds does. Usury ceilings on credit card rates are detrimental to consumer welfare, so would be counter to their legislative intent.

TI Accounting for the Demand for Financial Capital and Risk-Taking in Bank Cost Functions. AU Hughes, Joseph P.; Mester, Loretta J.

Millen, Robert A.
TI   A Comparison of Experienced American and European Manufacturers with Third Party Logistics Services. AU   Lieb, Robert C.; Millen, Robert A.; Van Wassenhove, Luk N.

Miller, Jeffrey B.
TI   Limited-Liability and the Design of Incentive Schemes Under Risk-Neutrality. AU   Brown, Pamela Clark; Miller, Jeffrey B.; Thornton, James R.

Mizrach, Bruce
PD   January 1993. TI   Mean Reversion in EMS Exchange Rates. AA   Federal   Reserve   Bank   of   New   York. SR   Federal Reserve Bank of New York Research Paper: 9301; Research Department - Room 901, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. PG   20. PR   no charge. JE   F31. KW   Random Walk. Unit Root.
AB   Time series evidence on exchange rates has been unable to reject the random walk hypothesis. A simple structural model that accounts for target zone nonlinearities provides conclusive evidence of mean reversion in EMS exchange rates.

PD   January 1993. TI   Target Zone Models with Stochastic Realignments: An Econometric Evaluation. AA   Federal Reserve Bank of New York. SR   Federal Reserve Bank of New York Research Paper: 9302; Research Department - Room 901, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. PG   25. PR   no charge. JE   F31. KW   Target Zones. Exchange Rates.
AB   This paper provides empirical support for the second generation of target zone models with stochastic devaluation risk. I propose a simple nonlinear framework with a time varying probability of exchange rate realignment. This model nests alternatives (i) with no devaluation risk; (ii) with constant devaluation risk; and (iii) the random walk. I reject these three in favor of a stochastic realignment model linked to yield spreads and the position of the exchange rate within the band.

Monfort, Alain
TI   Models Lineaires a Facteurs et Structure a Terme des Taux D'interet. AU   Clement E.; Gourieroux, Christian; Monfort, Alain.

TI   Prevision   de   Mesures   de   Prix   Contingents. AU   Clement, E.; Gourieroux, Christian; Monfort, Alain.

TI   Prediction of Contingent Price Measures. AU   Clement, E.; Gourieroux, Christian; Monfort, Alain.

Montiel, Peter J.
PD   August 1993. TI   Is the Parallel Market Premium a Reliable Indicator of Real Exchange Rate Misalignment in Developing Countries? AU   Montiel, Peter J.; Ostry, Jonathan D. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/93/70; International Monetary
Fund, 700 19th Street, Washington, DC 20431. PG   16. PR   not available. JE   F31, O11, F41. KW   Exchange Rates. Parallel Markets.
AB   It is often argued that the parallel market premium is a useful indicator of real exchange rate misalignment in developing countries. The empirical evidence does not, however, suggest the existence of a robust correlation between

these two endogenous variables that is independent of the nature of economic shocks and various structural relationships in the economy. This paper presents an analytical investigation of the reliability of the parallel market premium as an indicator of real exchange rate misalignment in the context of a fully optimizing model of a developing country. The analysis suggests that one should exercise caution in drawing inferences about the sign and magnitude of real exchange rate misalignment from the parallel market premium.

Moreau, Antoine
PD   July 1993. TI   Market Power of Personal Computer Producers in France. AA   INSEE. SR   University College London Discussion Paper: 93-07; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG   41. PR   3 pounds; checks payable to Dept. of Economics, UCL. JE   C50, L70. KW   Oligopoly. Product Differentiation.
AB   Two types of product differentiation are considered in the literature. Within-firm differentiation, where a firm offers a product-line and discriminates among customers according to their characteristics; across-firm differentiation, where firms try to differentiate themselves from their competitors. Using existing models encompassing these two types of differentiation, we propose a framework in which firms offer a product-line and have different reputations. Under the strong assumption that the quality-schedules are identical across firms, we show the existence of a price equilibrium. The model is estimated on data relating to the French Personal Computer market. Using specific assumption on the preferences on consumers and on the cost function, the competitive model is rejected in favor of the model with imperfect competition. The estimation seems to give an acceptable description of this market.

Moulton, Brent R.
PD   January 1993. TI   Interarea Indexes of the Cost of Shelter Using Hedonic Quality Adjustment Techniques. AA   Bureau of Labor Statistics. SR   Bureau of Labor Statistics Working Paper: 238; Bureau of Labor Statistics, 2 Massachusetts Avenue NE Room 4915, Washington, D.C. 20212. PG   40. PR   no charge. JE   C43, E31. KW   Price Indices. Cost of Shelter. Hierarchical Models.
AB   The cost of shelter is the single most important component of interarea differences in the cost of living. This paper constructs hedonic interarea indexes of the cost of shelter using a major new source of detailed microdata, the CPI Housing Survey. Identification of the exact location of housing units has permitted us to control for measured neighborhood characteristics, while variance components models are used to model the effects of unmeasured neighborhood characteristics. Hierarchical models with and without interarea slope coefficient variation are applied and model performance is evaluated by comparing out-of-sample predictions. The hierarchical approach allows us to pool information from different cities to more precisely estimate any given city's coefficients. The models can take account of the surveys' stratified, multi-stage design. Superlative and transitive index numbers are employed in the index-number construction.

Mukherjee, Amit S.
PD   not available. TI   The Impact of Knowledge on Quality. AU   Mukherjee, Amit S.; Van Wassenhove, Luk N.

AA INSEAD. SR INSEAD Working Papers: 93/30/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 28. PR not available. JE L15, M11. KW Product Quality. Formal Knowledge. Experience Knowledge.

AB By focusing on culture and tools, the literature creates a chicken-and-egg question for empirical researchers studying quality improvement efforts, since the long term use of quality tools is essential for creating a quality culture and a quality culture is needed for effective use of quality tools. We deal with this problem by studying the nature of knowledge used to improve quality. We use Principal Component Analysis to analyze the output of 37 tightly structured projects undertaken by one European firm during the 1980's. We identify four latent characteristics of the output: Experience Knowledge, Formal Knowledge, Domain Knowledge and Complexity. We show that these dimensions also describe the output of 15 less structured projects. Regression analysis of the impact of these dimensions on two project level performance indicators shows that the importance of Formal Knowledge increases as projects become less structured.

Murphy, Kevin M.

TI Cattle Cycles. AU Rosen, Sherwin; Murphy, Kevin M.; Scheinkman, Jose Alexandre.

TI Cattle Cycles. AU Rosen, Sherwin; Murphy, Kevin M.; Scheinkman, Jose Alexandre.

TI Social Status, Education and Growth. AU Fershtman, Chaim; Murphy, Kevin M.; Weiss, Yoram.

Nagashima, Takashi

TI Indefinability of the Common Knowledge Concept in Finitary Logics. AU Kaneko, Mamoru; Nagashima, Takashi.

Nakamura, Leonard I.

PD June 1993. TI Loan Screening Within and Outside of Customer Relationships. AA Federal Reserve Bank of Philadelphia. SR Federal Reserve Bank of Philadelphia Research Working Paper: 93-15; 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 D82, D83, G21. KW Lender Information. Screening.

AB When lenders possess information for screening loan projects, this information is valueless under anonymous competition in which a rejected borrower can approach new lenders without informing them about past rejections. However, when the borrower commits rights of first refusal to a single lender, as in a customer relationship, or to a limited number of lenders, then lender information can be quite valuable. Customer relationships can thus be viewed as a means for preserving lender profitability; their loss may drastically devalue lender information as a source of lender profitability.

Nashashibi, Karim

PD August 1993. TI Alternative Exchange Rate Strategies and Fiscal Performance in Sub-Saharan Africa. AU Nashashibi, Karim; Bazzoni, Stefania. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/93/68; International

Monetary Fund, 700 19th Street, Washington, DC 20431. PG 39. PR not available. JE O55, O57, E62, F31, F41. KW Exchange Rate Policy. Fiscal Deficit.

AB This paper investigates the relationship between fiscal performance in 28 sub-Saharan African countries over the 1980-91 period with movements in the exchange rates, the terms of trade, and other macroeconomic aggregates. It finds that the tax base in most of these countries is heavily dependent on imports and import substitutes. Consequently, an overvaluation of the exchange rate in countries which adopted a fixed exchange rate strategy undermines the tax base and results in a widening of the fiscal deficit when the purpose of the strategy is to restore the real exchange rate to its equilibrium through fiscal contraction. Those countries which pursued a variable exchange rate adjustment failed in attaining price stability, but exchange rate adjustment was critical in contributing to other macroeconomic objectives, particularly fiscal balance, competitiveness, and growth.

Neary, Peter

PD June 1993. TI The Veterans Charter and Canadian Women Veterans of World War II. AU Neary, Peter; Brown, Shaun. AA University of Western Ontario. SR University of Western Ontario Papers in Political Economy: 35; Department of Economics, Social Science Centre, University of Western Ontario, London, Ontario, CANADA N6A 5C2. PG 36. PR no charge. JE H55, H56, J16, D73. KW Veterans Benefits. Veterans Affairs. Canada.

AB This paper provides a history of the administration of veteran's affairs during and following World War II.

Netz, Janet S.

PD July 1993. TI An Empirical Test of the Effect of Basis Risk on Cash Market Positions. AA University of Delaware. SR University of Delaware Department of Economics Working Paper: 93-07; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. PG 24. PR not available. JE G13, G10, D81. KW Hedging. Futures Market. Commodity Futures.

AB Hedgers use futures markets to reduce the amount of price risk they bear. In doing so, however, they incur basis risk, that is, unexpected movements in the difference between the spot and futures prices. Basis risk arises when the futures price and the cash price of the commodity being hedged are not prefectly correlated. Theoretical work has shown that the presence of basis risk reduces output and the use of futures as a hedging instrument. This paper attempts to empirically measure the effect of basis risk on the cash market position. The particular industry studied is the storage of corn and soybeans. Results from the corn equation show that basis risk significantly reduces the level of storage, while results from soybeans are inconclusive. The results also show that storage behaves differently depending on whether the location is a port, where stocks are more sensitive to basis risk and the return to storage, and whether the location is a delivery point, where stocks are more sensitive to convenience yield.

PD July 1993. TI The Effect of Futures Markets on the Variability of the Spot Price of Wheat. AA University of Delaware. SR University of Delaware Department of Economics Working Paper: 93-08; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. PG 25. PR not

available. **JE** G13, G12. **KW** Commodity Futures. Return to Storage.
AB This paper analyzes the effect of the development of a futures market on storage behavior and spot price volatility. Commodity storage is inherently risky since the agent cannot know the output price. The more risk-averse are storers, the less storage they will undertake. The development of a futures market allows storers to eliminate price risk because the storer can lock-in a return to storage. The model shows that when a futures market exists, storage becomes more sensitive to changes in the return to storage. If storage and price are the primary adjustment mechanisms to supply and demand shocks, the increase in storage sensitivity means that storage will absorb more of the shock than previously. Empirical analysis using data from the Chicago Board of Trade supports the theoretical implications, and also reveals that the results are sensitive to the competitive structure of the futures market. Spot price variance is larger if the futures market is subject to manipulation, due to artificial price spikes caused by corners and attempted corners.

Newey, Whitney K.
TI Automatic Lag Selection in Covariance Matrix Estimation. **AU** West, Kenneth D.; Newey, Whitney K.

Nielsen, Lars Tyge
TI Risk Aversion and Prudence: The Case of Mean-Variance Preferences. **AU** Lajeri, Fatma; Nielsen, Lars Tyge.

Nishimura, Kazuo
PD October 1992. **TI** Family Expansion and Capital Accumulation of a Dynasty. **AU** Nishimura, Kazuo; Raut, Lakshmi K. **AA** Nishimura: Kyoto Institute of Economic Research. Raut: University of California, San Diego. **SR** University of California, San Diego Department of Economics Working Paper: 92-40; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. **PG** 22. **PR** $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. **JE** O40, O41, D91. **KW** Growth Models. Endogenous Fertility. Dynastic Utility. Life-Cycle Utility.
AB We consider a unified framework that combines two strands of previous literature on overlapping generations growth models of endogenous fertility and savings-one strand incorporating two-period lived agents with life-cycle utility functions and the other strand incorporating one period lived agents with dynastic utility functions. In this framework, we study the long-run effects of unfunded social security on fertility and savings; we characterize the dynamics of the optimal path in terms of the properties of the felicity index of life-cycle consumption of a generation, and the degree of altruism towards future generations. In particular, we find conditions that generate fluctuations in the equilibrium path of household income and fertility that are consistent with the Easterlin hypothesis. Our results include most of the previous results as special cases.

Norberg-Bohm, Vicki
TI Industrial Metabolism of Sulfur. **AU** Ayres, Robert U.; Norberg-Bohm, Vicki.

Nord, Roger
PD August 1993. **TI** Structural Adjustment, Economic Performance, and Aid Dependency in Tanzania. **AU** Nord, Roger; Mered, Michael; Agrawal, Nisha; Ahmed, Zafar. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/93/66; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 15. **PR** not available. **JE** O55, F35, E21, O47. **KW** Foreign Aid. Savings Rate.
AB Tanzania's adjustment program, which began in the mid-1980's, was accompanied by a sharp increase in the levels of foreign assistance. Previous studies, using published data, have not reflected much improvement in economic performance during the reform period. This paper attempts to shed new light on the relationship between adjustment and aid dependency in Tanzania, by adjusting the macroeconomic database to correct for data deficiencies in several important respects. A subsequent comparison with other sub-Saharan African countries shows that, contrary to traditional interpretation, Tanzania's increased dependence on foreign assistance did not lead to a deterioration in domestic savings performance. Efficiency of investment, however, has been substantially lower in Tanzania.

Nuxoll, Daniel A.
TI Capital Punishment and Murder: The Rich-Society Effect. **AU** Dnes, Antony W.; Nuxoll, Daniel A.

PD June 1992. **TI** Sufficient Conditions for the Gerschenkron Effect. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E92-16; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** 16. **PR** no charge. **JE** C43, C82. **KW** Index Numbers. National Income Accounting.
AB This paper examines conditions under which reported relative incomes and growth rates depend on the set of prices used to construct the income index. This phenomenon, called the Gerschenkron Effect, occurs under two different conditions: if relative prices and quantities move in opposite directions or if all agents share identical homothetic preferences.

PD June 1992. **TI** Differences in Relative Prices and International Differences in Growth Rates. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E92-17; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** 40. **PR** no charge. **JE** C43, C82, O47, D90. **KW** Economic Growth. Index Numbers. National Income Accounting.
AB This paper examines the empirical puzzle that income levels are correlated with the growth rates of real per capita income. It argues that technological progress is easier in some sectors than others, so during the process of development, relative prices change. The change of relative prices has three effects on the measured growth rate. First, the choice of base prices affects the growth rate; this phenomenon is sometimes called the Gerschenkron effect. Second, using any base prices or weights introduces a spurious acceleration into the index. Third, the evolution of relative prices affect agents' consumption patterns, and the resulting allocation of resources

between sectors affects the real growth rate.

Nuyens, R. P. A.

AB Queueing models are widely used for performance analysis of Flexible Manufacturing Systems (FMS). Most studies are done under steady state assumptions. The inherent flexibility of these systems in terms of input, volume or mix makes such an assumption hard to justify. In this paper, we investigate the convergence rate to steady state simple queueing models that are often used to depict FMS's. The study reveals that steady-state batches of moderate size. We therefore conclude that equilibrium models are appropriate for studying long-term planning problems, but for the operational control of FMS's, it is highly desirable to study the transient behavior of the system. On a broader scope, our investigation also shows that steady-state assumption used in the analysis of any inherently transient system should be carefully validated.

Oates, Wallace E.

Obstfeld, Maurice

AB This paper develops a stochastic continuous-time model in which international risk sharing can yield substantial welfare gains through its positive effect on expected consumption growth. The mechanism linking global diversification to growth is an attendant world portfolio shift from safe but low-yield capital into riskier high-yield capital. The presence of these two types of capital is meant to capture the idea that growth depends on the availability of an ever-increasing array of specialized, hence inherently risky, production inputs. Calibration exercises based on international consumption and stock market data imply that most countries reap large steady-state welfare gains from global financial integration.

Oliner, Stephen D.

Osang, Thomas

AB Using a model of trade with endogenous growth induced by human capital accumulation, we analyze the effects of trade in consumption goods on steady state growth rates. For the case of a small open economy we show that dynamic gains arise if the propensity to save is not too low (high) and output growth abroad exceeds (falls short of) the domestic autarky rate. For the case of a two-country world we show that dynamic gains from trade are possible for both countries if, in each country, the savings behavior matches the change in the terms of trade. A country facing a decline in its output price will grow faster if the propensity to save is sufficiently low, while a country that faces a rise in its output price will gain from trade if the savings rate is sufficiently high. If any (both) of these conditions is (are) violated, one country (both countries) will experience lower growth rates than in autarky. Paradoxical situations can arise. One country may experience dynamic gains (losses) although both countries experience dynamic losses (gains) from trade in terms of output growth. Finally, we show that in the two-country world there is no convergence in output growth rates through trade.

Osborne, Martin J.

AB We develop and analyze the Nash equilibria of a model of electoral competition in which each citizen chooses whether or not to run as a candidate. Citizens care about the policy position of the winning candidate; it is costly to become a candidate and there is a benefit from being the winner of the competition that goes beyond the returns to being able to implement one's preferred policies. We consider both plurality rule and majority rule with runoffs. Depending on the parameters an equilibrium in which there are one, two, or more candidates may exist. Under plurality rule we find, for some parameter values, three-candidate equilibria in which one candidate is sure to lose. We show that under either system the number of candidates depends positively on the ratio of the benefits of winning to the costs of entry and identify a sense in which a two-candidate equilibrium is more likely under plurality rule than under a runoff system.

Osler, Carol L.

AB This paper shows that exchange rate dynamics and speculators' horizons are determined simultaneously. Speculators' horizons affect exchange rate dynamics, because a shift of speculators from short to long horizons reduces exchange rate variability at the longer horizon. This shift also changes the relative attractiveness of short-and long-term speculation. In equilibrium, when speculators are indifferent across horizons, the share of short-term speculators can depend on a number of factors. These include the number of speculators, their risk-aversion, the volatility of fundamental shocks, price elasticities of imports and exports, speculation costs, and the autocorrelation of underlying shocks.

AB This paper examines the impact of interbank traders and other short-term speculators on short-term dynamics of floating exchange rates, concluding that speculative activity may be a force behind some familiar exchange rate properties, including their approximately random walk nature. The risk-averse, utility-maximizing speculators of the model smooth the effects of shocks to the exchange rate. This smoothing occurs for a broad set of fundamental generating processes, including stationary, even i.i.d., processes, and nonstationary ones. With sufficient speculative activity, exchange rates become statistically indistinguishable from a random walk and comparable to exchange rates observed during the floating rate period, regardless of the fundamentals' generating processes. Heavy speculative activity could also cause exchange rates to be better forecast by a random walk than by structural models, even when structural forces are correctly identified, and could lead exchange rates to have an extended response to sterilized intervention.

Ostry, Jonathan D.
TI Is the Parallel Market Premium a Reliable Indicator of Real Exchange Rate Misalignment in Developing Countries? AU Montiel, Peter J.; Ostry, Jonathan D.

Owen, Guillermo
TI Games with Permission Structures: The Disjunctive Approach. AU Gilles, Robert P.; Owen, Guillermo.

Padmanabhan, V.
TI Why Do We Observe Minimal Warranties? AU Lutz, Nancy A.; Padmanabhan, V.

Palfrey, Thomas R.
TI The Spending Game: Money, Votes, and Incumbency in Congressional Elections. AU Erikson, Robert S.; Palfrey, Thomas R.

Palmer, Karen
TI Toward An Integrated Theory of Open Economy Environmental and Trade Policy. AU Panagariya, Arvind; Palmer, Karen; Oates, Wallace E.; Krupnick, Alan J.

Panagariya, Arvind
AB With the evolution of the world economy, it is becoming increasingly clear that international trade and the global environment are inextricably linked. In consequence, it is no longer possible to formulate trade policies without considering their environmental ramifications. But this is only half the story. Domestic environmental programs have, themselves, impacts on patterns of trade and the global environment. Domestic programs for pollution control affect the relative prices of tradable goods and services; they may also influence the flow of pollutants across national boundaries. In this paper, we develop an integrated model of international trade and environmental flows using the dual approach. This model offers a fully general equilibrium approach and, unlike previous models, allows the incorporation of a variable abatement technology. We use this model to analyze optimal trade and environmental policies under a number of different assumptions about a country's influence on world markets and about the extent of cross-border pollution spillovers.

Parigi, Bruno M.
TI Multi-Task Sharecropping in Seminatural Economies: The Case of Central Italy from XIV to XX Century. AU Luporini, Annalisa; Parigi, Bruno M.

TI Contracting and Bargaining with Opportunistic Suppliers. AU Graziano, Clara; Parigi, Bruno M.

TI Dynamic Incentive Contracts with Intertemporal Demand Substitution. AU Cothren, Richard; Parigi, Bruno M.

Parker, Philip
TI A Cross-Cultural Study of Interpersonal Information Seeking and Giving Behavior. AU Dawar, Niraj; Parker, Philip; Price, Lydia J.

Peele, Pamela B.
AB A recent study of the retail car market reveals that white men get better deals when bargaining for new cars than blacks and women. In this paper, I offer two explanations of how this can occur without animus. First, I consider revenue-based price discrimination when the distribution of car valuations differs among buyers according to their race and gender. Then, I examine price discrimination with uniform car valuations

across all buyers regardless of race and gender, but with a seller possessing erroneous beliefs about buyers' valuations. A simple example shows how a seller's erroneous beliefs can be maintained in the absence of animus.

Pellegrini, Guido

PD May 1993. TI Sharing Stochastic Trends. AA Bank of Italy. SR University College London Discussion Paper: 93-06; Department of Economics, University College London, Gower Street, London WC1E 6BT, ENGLAND. PG 29. PR 3 pounds; checks payable to Dept. of Economics, UCL. JE O40, E32. KW Stochastic Trend. Structural VAR. Permanent Compuonent. Transitory Component.
AB If technical progress is the main source of growth, and technology advances move freely across countries, the output time series in different countries with similar economic structures should be cointegrated. The empirical analysis shows that this is not the case. The aim of the paper is to reconcile the theoretical presence of common technological innovations among countries and the empirical evidence of significant differences in the long run output dynamics. If the series are not cointegrated, but share some permanent disturbances, we say that the series have shared stochastic trend. I propose a formal model for output growth that allows common and idiosyncratic permanent innovations. The econometric identification is achieved by extending the Blanchard and Quah (1989) bivariate just-identified model to a multivariate over-identified case with different stochastic trends. The model has been applied to the industrial production indices of U.S.A, Germany and Italy. The results look reasonable, and, in particular, suggest that the hypothesis of technological leadership of USA is largely supported by the data. In line with the findings of other studies, the permanent component (that includes the shared trend) explains more than half of output variability in all countries.

Pereau, Jean-Christophe

PD November 1993. TI La Dynamique des Prix et des Salararies Industrials: Contrats Echelonnes et Anticipations Rationelles. AA Universite de Paris II and CEPIB. SR CEPREMAP Discussion Paper: 9308; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. PG 19. PR 25 Francs. JE C63, D50. KW Computational Technique. Staggered Contract. Rational Expectations.
AB The aim of this paper is to develop a multivariate rational expectations model of the price and wage dynamics with staggered contracts. We present a dynamic price-wage spiral describing an economy working under imperfect competition. The Blanchard and Kahn conditions on the eigenvalues of the model, numerically calibrated on French data, are analyzed. Then, we compute and interpet the dynamics multiplier associated with anticipated and unanticipated transitory shocks. We propose a typology of exogenous shocks on the price of raw materials in order to have a better understanding of the cost inflation mechanism since 1983 and the cyclical fluctuations of the real wage. This paper is written in French.

Pereira, Alfredo M.

TI Human Capital Accumulation and the Dynamic Effects of International Trade. AU Osang, Thomas; Pereira, Alfredo M.

TI Testing Theories of Economic Fluctuations and Growth in Early Development (The Case of the Chesapeake Tobacco Economy). AU Flores de Frutos, Rafael; Pereira, Alfredo M.

Perloff, Jeffrey M.

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

Phillips, Peter C.B

PD August 1993. TI Forward Exchange Market Unbiasedness: The Case of the Australian Dollar Since 1984. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1055; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven CT 06520. PG 20. PR no charge. JE F31, G13, C12, C13. KW Forward Exchange Market. Robust Nonstationary Regression. Unbiased Predictor.
AB This paper implements a new statistical approach to robust regression with nonstationary time series. The methods are presently under theoretical development in other work, and are briefly exposited here. They allow us to perform regressions in levels with nonstationary time series data, they accommodate data distributions with heavy tails and they permit serial dependence and temporal heterogeneity of unknown form in the equation errors. With these features the methods are well suited to applications with frequently sampled exchange rate data, which generally display all of these empirical characteristics. Our application is to daily data on spot and forward exchange rates between the Australian and US dollars over the period 1984-1991. Following the deregulation of the Australian foreign exchange market. We find big differences between the robust and the non-robust regression outcomes and in the associated statistical tests of the hypothesis but still give the forward rate an important role as a predictor of the future spot rate.

Picard, Pierre

TI Competing Vertical Structures: Precommitment and Renegotiation. AU Caillaud, Bernard; Jullien, Bruno; Picard, Pierre.

Pindyck, Robert S.

PD June 1993. TI Economic Instability and Aggregate Investment. AU Pindyck, Robert S.; Solimano, Andres. AA Pindyck: Massachusetts Institute of Technology and National Bureau of Economic Research. Solimano: The World Bank. SR National Bureau of Economic Research Working Paper: 4380; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 33. PR $5.00. JE E22, D81. KW Irreversible Investment. Uncertainty. Political Instability.
AB A recent literature suggests that because investment expenditures are irreversible and can be delayed, they may be highly sensitive to uncertainty. We briefly summarize the theory, stressing its empirical implications. We then use cross-section and time-series data for a set of developing and industrialized countries to explore the relevance of the theory for aggregate investment. We find that the volatility of the marginal profitability of capital - a summary measure of uncertainty - affects investment as the theory suggests, but the size of the effect is moderate, and is greatest for developing countries. We also find that this volatility has little correlation with indicia of political instability used in recent studies of growth, as well as several indicia of economic instability. Only inflation is highly correlated with this volatility, and is also robust in explaining investment.

Poterba, James M.

PD May 1993. TI State Responses to Fiscal Crises: The Effects of Budgetary Institutions and Politics. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4375; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 26. PR $5.00. JE H71, H72, D72. KW State Budgets. State Taxes. State Deficits.

AB This paper explores how state fiscal institutions and political circumstances affect the dynamics of state taxes and spending during periods of fiscal stress. The analysis focuses on the late 1980's, when sharp economic downturns in several regions, coupled with increased expenditure demands, led to substantial state budget deficits. State fiscal institutions, such as "no deficit carryover" rules and tax and expenditure limitations, appear to have real effects on the speed and nature of fiscal adjustment to unexpected deficits. Political factors are also important. When a single party controls the state house and the governorship, the reaction to state deficits is much faster than when party control is divided. In gubernatorial election years, tax increases and spending cuts are both significantly smaller than at other times.

Poyago-Theotoky, Joanna

PD July 1992. TI Information Sharing, Organisation Design and Social Welfare Under Cooperative and Non-Cooperative R&D in a Duopoly with Spillovers. AA University of Bristol. SR University of Bristol Economics Working Paper: 92-339; Department of Economics, University of Bristol, Alfred Marshall Building, 8 Woodland Road, Bristol BS8 1TN, ENGLAND. PG 42. PR no charge. JE O31, O32, L13, D43, D61. KW Research Joint Venture. Innovation. Dynamic Efficiency.

AB This paper presents a non-tournament model of process innovation with spillovers in the R&D process. It is shown that careful modeling of information-sharing and coordination of research activities leads to the conclusion that a Research Joint Venture (RJV) will economize on scarce R&D resources. Precisely how the RJV organizes its resources to achieve this depends crucially on the underlying features of the model, particularly the assumptions that are made about the nature of diminishing returns in R&D, of spillovers and of the type of research that is pursued. Another important issue that the paper addresses has to do with the direction of social welfare when there is a RJV. It is shown that a Pure Research Joint Venture (PRJV) comes closer to the social optimum and that there is a trade-off between static and dynamic efficiency when one moves from one form of organization to another and that the dynamic gains outweigh the static losses when one moves from an independent two-firm duopoly to a PRJV.

Price, Lydia J.

TI A Cross-Cultural Study of Interpersonal Information Seeking and Giving Behavior. AU Dawar, Niraj; Parker, Philip; Price, Lydia J.

Proulx, C.

TI Focal Points and Bargaining. AU Binmore, Ken; Swierzbinski, J.; Hsu, S.; Proulx, C.

Quinet, E.

TI Analyse du Caractere Incitatif des Contrats de Transport Urbain. AU Caillaud, Bernard; Quinet, E.

Raff, Daniel M. G.

TI Technological Heterogeneity, Adjustment Costs, and the Dynamics of Plant Shutdown Behavior: The American Motor Vehicle Industry in the Time of the Great Depression. AU Bresnahan, Timothy F.; Raff, Daniel M. G.

Ramanathan, Ramu

TI Short-Run Forecasts of Electricity Loads and Peaks. AU Engle, Robert F.; Granger, C. W. J.; Ramanathan, Ramu; Vahid-Araghi, Farshid; Brace, Casey.

Ramey, Garey

TI The Diamond Paradox: A Dynamic Resolution. AU Bagwell, Kyle; Ramey, Garey.

Rauch, James E.

PD January 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 University of California, San Diego Department of Economics Working Paper: 93-05; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. PG 28. PR $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. JE L10, D62. KW Agglomeration Economies. Interfirm Externalities. Industrial Parks.

AB When can we expect an industry subject to agglomeration economies to move from a site in a high-cost country or region to a site in a low-cost country or region? It is argued that the weight of history in preventing such a move is best understood as due to the presence of sunk costs resulting from the operation of many firms at a site, which can cause every firm to prefer to let other firms move first. It is shown that, by acquiring a monopoly on land suitable for the industry at the low-cost site, a developer can overcome this coordination failure by discriminatory pricing of land over time. This model is shown to be capable of explaining important stylized facts of behavior of developers of industrial parks in the United States. Moreover, this behavior can provide information on the nature of interfirm externalities. Obtaining a monopoly on suitable land may require cooperation of local government through measures such as restrictive zoning, suggesting a framework for analyzing the effects of local government policy on economic growth at the local level.

Rausser, Gordon C.

TI Modelling Natural Resource Negotiations: An Application to California Water Policy. AU Adams, Gregory D.; Rausser, Gordon C.; Simon, Leo K.

Raut, Lakshmi K.

TI Family Expansion and Capital Accumulation of a Dynasty. AU Nishimura, Kazuo; Raut, Lakshmi K.

PD December 1992. TI Subgame Perfect Manipulation of Children by Overlapping Generations of Agents with Two-Sided Altruism and Endogenous Fertility. AA University of California, San Diego and University of Pennsylvania. SR University of California, San Diego Department of Economics Working Paper: 92-54; Working Paper Coordinator,

Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. **PG** 27. **PR** $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. **JE** D91, H55. **KW** Two-Sided Altruism. Endogenous Fertility. Social Security.

AB In this paper we consider an overlapping generations model with endogenous fertility and two-sided altruism and show the limitations of applying commonly used open loop Nash equilibrium in characterizing equilibrium transfers from children to parents as voluntary old-age support. Since in our model children are concerned with parents' old -age consumption, agents have incentives to save less for old age and to have more children so as to strategically induce their children to transfer more old-age support. We formulate such strategic behavior within a sequential multi-stage game and use the notion of subgame perfect equilibrium to study the consequences of such strategic manipulations on fertility, savings, and Pareto optimality and then examine the role of social security o correct such strategic distortions.

PD January 1993. **TI** Dynamics of Endogenous Growth. **AU** Raut, Lakshmi K.; Srinivasan, T. N. **AA** Raut: University of California, San Diego. Srinivasan: Yale University. **SR** University of California, San Diego Department of Economics Working Paper: 93-03; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. **PG** 23. **PR** $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. **JE** O40. **KW** Growth Theory. Balanced Growth.

AB The consequences of private reproduction and capital accumulation decisions to long-run economic development have been the focus of research of a number of scholars in recent years. In the earlier literature on growth and development household formation, schooling, fertility and labor force participation decisions of households, their mortality experience and the resulting rate of population and labor force growth were assumed to be exogenous. The recent literature, in contrast, explicitly recognizes their endogeneity. In addition, greater emphasis placed on human as contrasted with physical capital in the growth process. Another strand of recent literature (Lucas(1988) and Romer(1986)) besides endogenizing growth, in per worker output and consumption, primarily by generating increasing scale economies in aggregate production. Almost all recent contributions to growth theory focus on models for which an equilibrium steady state growth path exists, although it need not be unique or independent of initial condition. Analytical attentions is focused almost exclusively on the properties of steady-state paths. In contrast, our model is not geared to generating balanced growth. In fact, the non-linear dynamics of the model generates a plethora of outcomes (depending on the functional forms, parameters and initial conditions) that include not only the neoclassical steady state with exponential growth of population with constant per capita income and consumption, but also growth paths which do not converge to a steady state and are even chaotic. Per capita output grows exponentially (and super exponentially) in some economies.

Raychaudhuri, Subhashis
PD June 1992. **TI** Almost Strict Competitiveness in Extensive Form. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E92-19; Department

of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** 24. **PR** no charge. **JE** C72. **KW** Game Theory. Extensive Games. Subgame Perfection.

AB We consider an extension of an almost strictly competitive game, introduced by Aumann (1961), in n-person extensive games by incorporating Selten's subgame perfection. We call it a subgame perfect weakly almost (spw-almost) strictly competitive game, in particular, an spw-almost strictly competitive game in strategic form is simply called a w-almost strictly competitive game. The centipede game given by Rosenthal (1981) and finitely repeated prisoner's dilemma are examples for spw-almost strictly competitive games. We give some general results on the structure of this class of games. One result gives an easy way to verify the almost strict competitiveness of a given extensive game. We show that a finite repetition of a w-almost strictly competitive game in strategic form is spw-almost strictly competitive and so is two-person weakly unilaterally competitive extensive game, introduced by Kats and Thisse (1991) for normal form games.

Rehm, Dawn
TI Economic Trends in Africa (The Economic Performance of Sub-Saharan African Countries). **AU** Dhonte, Pierre; Clement, Jean; Matungulu, Mbuyamu; Rehm, Dawn.

Riddell, W. Craig
TI Qualifying for Unemployment Insurance: An Empirical Analysis. **AU** Green, David A.; Riddell, W. Craig.

Rockett, Katharine
TI Licensing a Sequence of Innovations. **AU** Gandal, Neil; Rockett, Katharine.

Rodrik, Dani
PD March 1990. **TI** Trade Policies and Development: Some New Issues. **AA** Harvard University. **SR** Harvard John F. Kennedy School of Government Discussion Paper: 181D; John F. Kennedy School of Government, 79 J.F.K. Street, Cambridge, MA 02138. **PG** 25. **PR** no charge. **JE** F13, F41, E65. **KW** Macroeconomic Instability. Trade Liberalization. Trade Reform.

AB The 1980's have seen the beginnings of a change of heart among developing country policymakers, as the import-substitution consensus of the previous decade has all but evaporated. It is paradoxical that the 1980's should have become the decade of trade liberalization in LDCs, since this has also been a decade of macroeconomic instability. The benefits of liberalization become muted under conditions of macro instability. This paper discusses three questions that arise with this experience. First, how can the credibility and sustainability of the reforms be enhanced? Second, what role should trade reform play when it is implemented in the context of macroeconomic instability? Third, should we worry about the consequences of trade reform in the imperfectly competitive environments that characterize the developing economies?.

Roemer, John E.
PD September 1993. **TI** Political Cycles. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-17; Department of Economics, University of California at

Davis, Davis, CA 95616-8578. **PG** 19. **PR** $3.00 U.S. and Canada. $4.00 international. **JE** D72, C72. **KW** Voting Equilibrium. Uncertainty. Ideological Parties. Political Realignment.

AB A model of elections is put forth in which there are two parties each representing a different constituency of voters (the poor and the rich) The political issue is the choice of a proportional tax rate on income, proceeds of which are used to finance a public good. There is a stochastic element in which party wins the elections, due to party uncertainty concerning voter preferences, or due to uncertainty concerning which voters will show up at the polls. A political equilibrium in one period consists in a tax policy put forth by each party, and a probability that each party wins. A long series of elections is simulated (100 periods). Voter preferences for the public good change adversely as a function of length of time a particular party is in power. Thus, if the party in power funds high levels of the public good, preferences start to move against the the public good. It is shown that this model generates political cycles and it is argued that these cycles are of fundamentally different origin from that discussed in the realignment literature.

PD September 1993. **TI** On a Mechanisms for Implementing Egalitarianism with Responsibility. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-18; Department of Economics, University of California at Davis, Davis, CA 95616-8578. **PG** 25. **PR** $3.00 U.S. and Canada. $4.00 international. **JE** D63, H21, H31. **KW** Responsibility. Egalitarianism. Optimal Taxation. Utilitarianism.

AB A prominent view among contemporary egalitarian political philosophers is that equality of condition should be tempered by the consequences of differential responsibility. Differences in condition, that is, should not be adjusted if they are due to differential choices for which individuals are deemed responsible. An egalitarian therefore requires a way of deciding the extent to which differences in condition are, indeed, due to causes for which individuals are responsible. An economic environment is proposed in which this problem can be studied, and a method is put forth by which aspects of condition due to personal responsibility can be separated from the remaining aspects. Although the mechanism proposed usually redistributes more than utilitarianism and less than Rawlsianism, it is shown that neither of these inequalities always holds. The paper can be viewed as a formalization of ideas in the author's "A pragmatic theory of responsibility for the egalitarian planner.".

PD September 1993. **TI** Political-Economic Equilibrium when Parties Represent Constituents: The Unidimensional Case. **AA** University of California, Davis. **SR** University of California at Davis Economics Department Working Paper: 93-19; Department of Economics, University of California at Davis, Davis, CA 95616-8578. **PG** 35. **PR** $3.00 U.S. and Canada. $4.00 international. **JE** D72, C72. **KW** Voting Equilibrium. Downsian Parties. Ideological Parties. Differentiated Policies.

AB A political-economic environment is studied in which two parties, representing different constituencies of citizens, compete over a proportional tax rate to be levied on private endowments, to finance a public good. Although parties know the distribution of citizen traits (preferences and endowments), they are uncertain about the distribution of traits among the citizens who will turn up at the polls. This uncertainty engenders an endogenously derived function giving the probability that any one tax policy t1 will defeat another t2 in the election. The function is discontinuous and is not differentiable at some points of continuity: thus, it is argued, the extent theorems in the literature on partisan' parties, asserting the existence of political equilibrium, which assume that the function is C1 or C2, are vacuous. Existence theorems are proved for our model, and the nature of equilibrium is compared with the equilibrium that exists when Downsian parties (ones whose objective is to maximize the probability of victory face uncertainty).

Roller, Lars Hendrik
TI Customer Loyalty, Scale Economies and Economies of Scope in French Funds: Additional Evidence. **AU** Dermine, Jean; Roller, Lars Hendrik; Bonanni, Carole.

Rosen, Harvey S.
TI Financial Market Interpretations of Civil War News. **AU** Guinnane, Timothy W.; Rosen, Harvey S.; Willard, Kristen L.

Rosen, Sherwin
PD April 1993. **TI** Cattle Cycles. **AU** Rosen, Sherwin; Murphy, Kevin M.; Scheinkman, Jose Alexandre. **AA** University of Chicago. **SR** Economics Research Center/NORC Discussion Paper: 93-2; Economics Research Center/NORC, 6030 S. Ellis, CHICAGO, Illinois 60637. **PG** 19. **PR** $2.00 from the NORC librarian. **JE** D20, Q11, Q13. **KW** Beef Consumption. Cattle Stocks. Breeding.

AB U.S. beef cattle stocks are among the most periodic time-series in economics. A theory of cattle cycles is constructed, based upon rational breeding stock inventory decisions in the presence of gestation and maturation delays between production and consumption. The low fertility rate of cows and substantial lags between fertility and consumption decisions cause the demographic structure of the herd to respond cyclically to exogenous shocks in demand for beef and in production costs. Known biotechnology of cattle demographics imply sharp numerical benchmarks for the dynamic system that describes the evolution of cattle stocks and beef consumption. These compare very closely to structural econometric time-series estimates over the 1875-1990 period and prove that systematic cattle cycles have a wholly rational explanation.

PD July 1993. **TI** Cattle Cycles. **AU** Rosen, Sherwin; Murphy, Kevin M.; Scheinkman, Jose Alexandre. **AA** Rosen and Murphy: University of Chicago. and National Bureau of Economic Research. Scheinkman: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 4403; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** $5.00. **JE** Q10, Q11. **KW** Beef Cattle. Cycle Behavior.

AB See other entry.

Rosenthal, Robert
TI Asking Prices as Commitment Devices. **AU** Chen, Yongmin; Rosenthal, Robert.

Rubinstein, Ariel

PD August 1993. TI Why are Linear Orderings so Common in Natural Language? AA Tel-Aviv University. SR Tel-Aviv Sackler Institute of Economic Studies Working Paper: 14/93; Department of Economics, Tel-Aviv University, Ramat Aviv 69978, ISRAEL. PG 22. PR no charge. JE A12. KW Linear Ordering. Natural Language. Learnability.

AB The aim of this paper is to explain the fact that linear ordering is one of the few structures of binary relations that is observed in natural language. Three features of a binary relation are studied: (1) The ability to use the relation to indicate nameless elements; (2) The ease of learning the relation by means of examples, and (3) the accuracy with which the vocabulary spanned by the relation can be used to approximate the actual terms to which a user wishes to refer. The structure of linear orderings is shown to perform well in these three respects and its common use is attributed to evolutionary forces which favor structures that are optimal or nearly optimal in these and similar respects.

Rubio, Santiago J.

PD May 1993. TI Optimal Management of Groundwater With Increasing Demand. AU Rubio, Santiago J.; Martinez, Constantino; Castro, Juan, P. AA Rubio: University of Valencia, Spain. Constantino and Castro: University of Murcia, Spain. SR University of California at Berkeley, Department of Agricultural and Resource Economics (CUDARE) Working Paper: 675; Department of Agricultural and Resource Economics, 313 Giannini Hall, UC Berkeley, Berkeley, CA 94720. PG 32. PR $10.50. JE Q20, Q25, C61. KW Groundwater. Optimal Management. Water Supply.

AB The different kinds of optimal paths and steady states in the standard model of optimal management of a single-cell aquifer are completely characterized. The steady states include two corner solutions, the physical exhaustion of the initial water reserves and a steady state with water reserves at the maximum storage capacity of the aquifer. In the second part of the paper we show that only one of the large range of steady states of the standard model is optimal if the demand is increasing and its rate of growth is less than the rate of interest. The steady state implies the physical exhaustion of the initial water reserves of the aquifer in a finite time.

Ruys, Pieter H. M.

TI Coalition Formation in Large Network Economies. AU Gilles, Robert P.; Ruys, Pieter H. M.; Shou, Jilin.

PD May 1993. TI Efficient Commodity Taxation to Finance Public Infrastructure. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E93-05; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE H52, H21. KW Infrastructure. Efficient Taxation.

AB When public infrastructure in the broad sense is increasingly provided and financed by taxes that are not related to this infrastructure, both fiscal and efficiency problems arise. By introducing the concept of vertical complementarity between some infrastructure and the private use made of it, the marginal revenue of infrastructure can be defined, and its optimal size can be determined. The implied efficient commodity taxes levied on a class of commodities in segmentable markets are financing the infrastructure. Fiscal and institutional implications are discussed, especially in case the infrastructure crosses international boundaries.

TI Modelling of Economies with Relational Constraints on Coalition Formation. AU Gilles, Robert P.; Haller, Hans H.; Ruys, Pieter H. M.

Saffer, Henry

TI Effects of Alcohol Price Policy on Youth. AU Grossman, Michael; Chaloupka, Frank J.; Saffer, Henry; Laixuthai, Adit.

Sakellaris, Plutarchos

PD July 1993. TI The Stock Market Response to Shocks in the Profitability of Capital. AA University of Maryland, College Park. SR University of Maryland Department of Economics Working Paper: 93-7; University of Maryland, Department of Economics, College Park, MD 20742. PG 28. PR no charge. JE G12, G32, D92. KW Oil Shocks. Stock Excess Returns.

AB This paper studies the response of firm stock market valuation to shocks in the input factor prices, and the output price. A structural model that links the excess returns to the firm's equity to their investment history and the evolution of the prices is developed and estimated using a panel of U.S. manufacturing firms spanning the period 1959 to 1985. The data support the theoretical implication that firms with relatively more of their capital consisting of vintages built when a factor of production was relatively cheap are hit harder in their market value by an adverse shock to the price of that factor. In simulations, the model seems to be able to replicate the significant heterogeneity in the response of firms' market values to the oil shock of 1973-74. The model accounts for a significant part of the variation in the excess returns of the firms in the sample, thus providing evidence for a systematic link between the stock market valuation of firms and the economic factors that affect the profitability of their capital.

PD August 1993. TI Investment Under Uncertain Market Conditions. AA University of Maryland, College Park. SR University of Maryland Department of Economics Working Paper: 93-9; University of Maryland, Department of Economics, College Park, MD 20742. PG 18. PR no charge. JE E22, L60, D92. KW q Theory. Adjustment Costs.

AB This paper studies the responsiveness of firm investment to shocks in the input factor and output prices (the market conditions) by using stock market information on excess returns. The q theory of investment is modified to allow for heterogeneous capital, ex post inflexible technology, and irreversible investment. A structural model linking the excess returns to a firm's equity to the firm's investment history and the evolution of the market conditions is estimated using a panel of U.S. manufacturing firms. Contrary to other studies, the estimates of the cost of adjusting the capital stock are economically sensible. They imply a high degree of sensitivity of investment to fundamental variables that affect the profitability of capital such as the market conditions and the purchase price of capital.

Salanie, B.

TI Macroeconometric Disequilibrium Models. AU Laroque, G.; Salanie, B.

Salomon, Marc
TI   Batching Decisions: Structure and Models. AU   Kuik,
Roelof; Salomon, Marc; Van Wassenhove, Luk N.

Samiei, Hossein
TI   An Extended Scenario and Adjustment Model for
Developing Countries. AU   Kumar, Manmohan S.; Samiei,
Hossein; Bassett, Sheila.

Sayers, Chera L.
TI   Non-Linearity in the Interest Rate Risk Premium.
AU   Jaditz, Ted; Sayers, Chera L.

Scaramozzino, Pasquale
TI   Public   Debt   and   Redistribution.   AU   Marini,
Gianicarlo; Scaramozzino, Pasquale.

Scheinkman, Jose Alexandre
TI   Cattle Cycles. AU   Rosen, Sherwin; Murphy, Kevin
M.; Scheinkman, Jose Alexandre.

TI   Cattle Cycles. AU   Rosen, Sherwin; Murphy, Kevin
M.; Scheinkman, Jose Alexandre.

TI   Back to the Future: Generating Moment Implications for
Continuous-Time Markov Processes. AU   Hansen, Lars Peter;
Scheinkman, Jose Alexandre.

Schill, Michael
TI   The Japanese Presence in the European Financial
Services Sector: Historical Perspective and Future Prospects.
AU   Hawawini, Gabriel; Schill, Michael.

TI   Current State and Expectations for European Equity
Trading Within the Common Market.   AU   Hawawini,
Gabriel; Schill, Michael.

Schiller, Robert J.
PD   July 1993. TI   Aggregate Income Risks and Hedging
Mechanisms. AA   Yale University and National Bureau of
Economic Research. SR   National Bureau of Economic
Research Working Paper: 4396; National Bureau of Economic
Research, 1050 Massachusetts Avenue, Cambridge, MA 02138.
PG 48. PR $5.00. JE F30, G15. KW Risk Sharing.
Aggregate Income.
AB   Estimates are made, from time series data on real gross
domestic products, of the standard deviations of returns in
markets for perpetual claims on countries' incomes. The results
indicate that the variability of returns is of a magnitude
comparable to that of returns in stock markets. Evidence is
shown that there may be only minimal possibility of cross
hedging these returns in existing capital markets. Methods of
establishing markets for perpetual claims on aggregate incomes
are examined. Such markets, by allowing hedging of these
aggregate income risks, might make for dramatically more
effective international macroeconomic risk sharing than is
possible today. Retail institutions are described that might
develop around such markets and help the public with their risk
management. However, the establishment of such markets
would also incur the risk of major financial bubbles and panics.

Schmidt-Bleek, F. B.
TI   Toward a Universal Measure of Environmental
Disturbance. AU   Ayres, Robert U.; Schmidt-Bleek, F. B.

Schnabel, Reinhold
TI   Living Arrangements: Health and Wealth Effects.
AU   Borsch-Supan, Axel; McFadden, Daniel; Schnabel,
Reinhold.

Scott, Andrew
TI   Seasonality   in   Dynamic   Regression   Models.
AU   Harvey, Andrew C.; Scott, Andrew.

Sevestre, P.
TI   Linear Models for Panel Data. AU   Matyas, Laszlo;
Sevestre, P.

Shachar, Ron
TI   Correcting   for   Errors   in   Retrospective   Data.
AU   Eckstein, Zvi; Shachar, Ron.

Sharkey, William W.
PD   January 1992. TI   Optimal Non-Linear Pricing with
Regulatory Preference Over Customer Types. AU   Sharkey,
William W.; Sibley, David S. AA   Sharkey: Bellcore. Sibley:
University of Texas. SR   Bellcore Economics Discussion
Paper: 75; Room 2Q-338, Bellcore, 445 South Street,
Morristown, New Jersey 0792-1910. PG   not available.
PR   not available. JE   D40. KW   Non-Linear Pricing.
Two Part Tariffs. Entry.
AB   In this paper we characterize the Pareto optimal set of
non-linear pricing schedules when non-negative weights are
assigned to each customer type. Our analysis first compares
general non-linear tariff schedules and sets of self-selecting two
part tariffs, when there are two customer types and the cost
function is linear. We then derive optimal sets of two part tariffs
for arbitrary numbers of customer types and general cost
functions. We also consider the sustainability of non-linear
pricing schedules under the threat of entry of rival firms.

TI   Alternative Methods for Cost Allocation in Stochastic
Service Systems. AU   McLean, Richard P.; Sharkey, William
W.

TI   Telephone Company Entry into Cable Television: A Re-
Evaluation. AU   Goodman, Matthew; Lu, Kevin; Sharkey,
William W.; Srinagesh, Padmanabhan; Stolleman, Neal.

PD   April 1993. TI   A   Characterization   of   Some
Aspiration Solutions with an Application to Spatial Games.
AA   Bellcore. SR   Bellcore Economics Discussion Paper:
95; Room 2Q-338, Bellcore, 445 South Street, Morristown,
New Jersey 07962-1910. PG   not available. PR   not
available. JE   C71. KW   Aspirations. Cooperative Game.
Spatial Games.
AB   Aspirations   are   minimal   elements   in   the   set   of
acceptable, or coalitionally rational payoff vectors in a
cooperative game with transferable utility. This paper defines
and characterizes four solution concepts from the bargaining
set family on the set of aspirations. Each solution is fully
characterized in terms of properties of balanced and separating
collections of coalitions associated with the vector of
coalitional excess terms e(S,x)=v(S)-x(s) for any S in N. The
solutions are examined in greater detail on the class of simple
games, and on the class of spatial games without transferable
utility.

TI   An   Approach   to   the   Pricing   of   Broadband
Telecommunications Services. AU   McLean, Richard P.;

Sharkey, William W.

Shephard, Neil
TI Estimation and Testing of Stochastic Variance Models.
AU Harvey, Andrew C.; Shephard, Neil.

Sherman, Robert P.
PD May 1992. TI The Limiting Distribution of the Maximum Rank Correlation Estimator. AA Bellcore. SR Bellcore Economics Discussion Paper: 83; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE C10, C13. KW Han's MRC Estimates. Asymptotic Theory. Rank Estimators.
AB Han's maximum rank correlation (MRC) estimator is shown to be square-root-n consistent and asymptotically normal. The proof rests on a general method for determining the asymptotic distribution of a maximization estimator, a simple U-statistic decomposition, and a uniform bound for degenerate U-processes. A consistent estimator of the asymptotic covariance matrix is provided, along with a result giving the explicit form of this matrix for any model within the scope of the MRC estimator. The latter result is applied to the binary choice model, and it is found that the MRC estimator does not achieve the semiparametric efficiency bound.

TI Rank Estimators for Monotone Index Models.
AU Cavanagh, Chris; Sherman, Robert P.

PD December 1992. TI U-Processes in the Analysis of a Generalized Semiparametric Estimator. AA Bellcore. SR Bellcore Economics Discussion Paper: 85; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE C10, C13, C14. KW Asymptotic Theory. Semiparametric Estimation.
AB We prove square-root-n consistency and asymptotic normality of a generalized semiparametric regression estimator that includes as special cases Ichimura's semiparametric least squares estimator for single index models, and the estimator of Klein and Spady for the binary choice regression model. Two function expansions reveal a type of U-process structure in the criterion function; then new U-process maximal inequalities are applied to establish the requisite stochastic equicontinuity condition. This method of proof avoids much of the technical detail required by more traditional methods of analysis. The general framework suggests other square-root-n consistent and asymptotically normal estimators.

Shleifer, Andrei
PD May 1993. TI Corruption. AU Shleifer, Andrei; Vishny, Robert W. AA Shleifer: Harvard University and National Bureau of Economic Research. Vishny: University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4372; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 21. PR $5.00. JE D73, K42. KW Corruption. Development. Administrative Process.
AB This paper presents two propositions about corruption. First, the structure of government institutions and the political process are a very important determinant of the level of corruption. In particular, weak governments, which do not control their agencies would lead to ultra-high corruption levels. Second, the illegality of corruption and the need for secrecy make it much more distortionary and costly than its sister activity, taxation. These results may explain why in some less developed countries, corruption is so high and so costly to development.

Shou, Jilin
TI Coalition Formation in Large Network Economies.
AU Gilles, Robert P.; Ruys, Pieter H. M.; Shou, Jilin.

Shoven, John B.
TI Ranking Mutual Funds on an After-Tax Basis.
AU Dickson, Joel M.; Shoven, John B.

Shubik, Martin
PD September 1993. TI The Theory of Money and Financial Institutions. AA Yale University. SR Yale Cowles Foundation Discussion Paper: 1056; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven CT 06520. PG 31. PR no charge. JE C72, E40, G20. KW Money. Financial Institutions. Strategic Market Games.
AB A sketch of a game theoretic approach to the Theory of Money and Financial Institutions is represented in a nontechnical, nonmathematical manner. The detailed argument and specifics are presented in previous articles and in a forthcoming book.

Sibert, Anne
PD July 1993. TI Government Finance in a Model of Currency Substitution. AU Sibert, Anne; Liu, Lihong. AA Sibert: Virginia Polytechnic Institute. Liu: University of Kansas. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E93-11; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE F36. KW Cash in Advance. Seigniorage.
AB Our model is a variant of the cash-in-advance model. Goods must be purchased in the seller's currency, but currency may be traded before shopping at a cost. This cost is a measure of substitutability. The model is applied to seigniorage taxation. We show that optimal money growth is positive and increasing in substitutability if and only if first- and second-period consumption are gross substitutes. If governments act independently, money growth is suboptimally low if currencies are sufficiently substitutable and too high otherwise.

Sibley, David S.
TI Optimal Non-Linear Pricing with Regulatory Preference Over Customer Types. AU Sharkey, William W.; Sibley, David S.

PD December 1992. TI Multiproduct Nonlinear Pricing with Multiple Taste Characteristics. AU Sibley, David S.; Srinagesh, Padmanabhan. AA Sibley: University of Texas. Srinagesh: Bellcore. SR Bellcore Economics Discussion Paper: 94; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE D40. KW Nonlinear Pricing. Pricing Rules.
AB Motivated by recent work of Wilson, we present conditions under which the optimal multiproduct nonlinear price schedule for a monopolist can or cannot be implemented

by computing optimal nonlinear prices separately, for each market. If it can, we say that it can be unbundled; if not, then bundling is said to occur. A set of conditions is presented under which unbundling and bundling of the optimal price schedule are equivalent. Other conditions are presented which ensure that either bundling or unbundling is optimal. The main result of the paper is that under very plausible conditions, the largest consumer in at least one market will pay a marginal price lower than marginal cost.

Siklos, Pierre L.

TI   The Common Development of Institutional Change as Measured by Income Velocity: A Century of Evidence from Industrialized Countries. AU   Bordo, Michael D.; Jonung, Lars; Siklos, Pierre L.

Simon, Leo K.

TI   Modelling Natural Resource Negotiations: An Application to California Water Policy. AU   Adams, Gregory D.; Rausser, Gordon C.; Simon, Leo K.

Sin, Chor-Yiu

PD   November 1992. TI   Information Criteria for Selecting Possibly Misspecified Parametric Models. AU   Sin, Chor-Yiu; White, Halbert. AA   University of California, San Diego. SR   University of California, San Diego Department of Economics Working Paper: 92-47; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. PG   24. PR $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. JE   C10, C50, C52. KW   Adapted Mixingale. Penalized Likelihood. Misspecified Models.
AB   We consider the use of penalized likelihood criteria for selecting models of dependent processes. The models may be strictly nested, overlapping or non-nested, linear or nonlinear, and correctly specified or misspecified. The dependent processes are assumed sufficiently regular as to satisfy laws of large numbers, central limit theorems or laws of iterated logarithms. We provide conditions on the penalty term sufficient to guarantee the selection, with the probability one (or with probability approaching one), of the model that attains the lower average Kullback-Leibler Information Criterion (KLIC), or, when both have the same KLIC, the more parsimonious model. As special cases, our results describe the model selection properties of the Akaike, Schwarz and Hannan-Quinn information criteria. As examples, we consider selection of possibly misspecified ARMAX-GARCH and STAR (Smooth Transition Autoregressive) models.

Singal, Vijay

TI   Privatization and Competition: The Intra-Industry Effects of the Sale of British Airways and Air Canada. AU   Eckel, Catherine C.; Eckel, Doug; Singal, Vijay.

Slade, Margaret E.

PD   September 1993. TI   Empirical Games: The Oligopoly Case. AA   University of British Columbia and G.R.E.Q.E. SR   University of British Columbia Department of Economics Discussion Paper: 93-31; Department of Economics, University of British Columbia, 1873 East Mall, Room 997, Vancouver, B.C. V6T 1Z1 CANADA. PG   53. PR   JE   L13, C51, C72, C73, L60. KW   State-Space Games. Dynamic Games.

AB   In this paper, I examine methods used to construct and estimate game-theoretic models of oligopolistic interactions, and I survey some of the empirical findings. Both static and dynamic games are covered. Static models provide useful summary statistics concerning the outcomes of oligopolistic interaction, whereas dynamic models attempt to capture more complex strategic behavior. In the exposition of static games, I consider two empirical approaches: the first-order approach and the dual approach. When we turn to dynamics, I limit my remarks to state-space games -- games in which actions taken in one period shift payoffs in subsequent periods. With state-space games, all history that is payoff relevant is summarized by a small set of variables -- the state -- and players' strategies depend only on the state and time.

Slivinski, Al

TI   A Model of Political Competition with Citizen-Candidates. AU   Osborne, Martin J.; Slivinski, Al.

Solimano, Andres

TI   Economic Instability and Aggregate Investment. AU   Pindyck, Robert S.; Solimano, Andres.

Sopher, Barry

PD   June 1993. TI   Communication and Coordination in Signalling Games: An Experimental Study. AU   Sopher, Barry; Zapater, Inigo. AA   Sopher: Rutgers University. Zapater: Brown University. SR   Brown University Department of Economics Working Paper: 93-38; Department of Economics, Brown University, Providence, Rhode Island 02912. PG   33. PR   no charge. JE   C72, C78, C91, C92. KW   Communication. Cheap Talk. Signalling Refinements. Experiments. Credible Message.
AB   This paper reports on an experiment testing Credible Message Rationalizability (CMR) in one-shot and repeated signalling games with costless communication. CMR is a non-equilibrium theory combining rationalizability with the idea of honesty as a focal policy. Two conventions of behavior arise in the games, Partial and Full Truth-telling In one-shot games, subjects manage to refine honesty roughly as predicted by CMR. In repeated games, Full truth-telling is more prevalent. The repeated game gives the receiver power to impose a preferred convention. Full truth-telling is especially prevalent when there is a conflict between conventions.

Spiegel, Yossef

PD   April 1992. TI   Investment in Flexibility Under Rate Regulation. AA   Bellcore. SR   Bellcore Economics Discussion Paper: 74; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG   not available. PR   not available. JE   L51, G32, G38. KW   Rate Regulation. Flexibility. Capital Structure. Gold Plating.
AB   This paper considers the effects of a regulated firm's capital structure on the firm's choice of technology. In models of rate regulation, the firm has an incentive to adopt a technology that is too inflexible, relative to the social optimum, in the sense that it would like to choose a cost function with higher than optimal variable costs and lower than optimal fixed costs. This effect arises because regulators wish to maximize welfare, and therefore have an incentive to require that the regulated price will be set as close as possible to marginal cost. Hence, a technology with a low marginal cost is associated

with a low regulated price, and is not attractive to the firm. Performance under rate regulation can be improved, however, if the firm is leveraged, because debt induces regulators to increase the regulated price to prevent the firm from becoming financially distressed. Consequently the cost of flexibility to the firm is lowered, leading it to choose a more flexible technology, closer to the socially optimal level. In the context of this model, the firm may have an incentive to goldplate (i.e., waste resources) if regulators restrict its ability to issue debt. This incentive disappears, however, when the firm is allowed to issue its most preferred capital structure.

PD August 1992. TI Horizontal Subcontracting. AA Bellcore. SR Bellcore Economics Discussion Paper: 80; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07902-1910. PG not available. PR not available. JE L13, L23, L41. KW Horizontal Subcontracting. Cournot Competition. Entry Deterrence.
AB Horizontal subcontracting agreements between rival firms capable of both producing and marketing their products independently are common. This paper explains this practice and evaluates its welfare implications. The analysis shows that in a duopoly, asymmetric firms with convex costs can use horizontal subcontracting to allocate production more efficiently between them and consequently generate a mutually beneficial surplus. For a wide range of parameters, this increase in production efficiency leads to an increase in industry output. The counterintuitive result is that welfare is thereby enhanced. In fact, even when industry output falls welfare can still increase if production costs are sufficiently lowered.

PD February 1993. TI The Capital Structure and Investment of Regulated Firms Under Alternative Regulatory Regimes. AA Bellcore. SR Bellcore Economics Discussion Paper: 92; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE L51, G32, G38. KW Capital Structure. Rate Regulation. Investment.
AB This paper explains how regulated firms choose their capital structure, and what are the effects of this choice on investment and on regulated rates. It is shown that in equilibrium, firms have an optimal debt level that given this debt level, the regulated price is yet high enough to ensure that firms never go bankrupt. The analysis of the equilibrium yields testable hypotheses concerning the effects of changes in cost parameters and in the regulatory climate on the equilibrium investment level, capital structure and regulated price. Finally, the analysis shows that a regulatory restriction on the ability of the firm to issue securities may have an adverse effect on investment and consequently may harm consumers.

PD February 1993. TI Capital Structure With Countervailing Incentives. AU Spiegel, Yossef; Spulber, Daniel F. AA Speigel: Bellcore. Spulber: Northwestern University. SR Bellcore Economics Discussion Paper: 93; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE G32, G38, L51. KW Capital Structure. Regulation. Investment. Asymmetric Information.
AB Studies of capital structure have often focused on the regulated sector. This paper shows that a regulated firm's choice of capital structure is affected by countervailing incentives. The firm wishes to signal high value to capital markets to boost the market value of its securities, but at the same time it also wishes to signal high cost to regulators to

induce them to increase its rates. It is shown that these countervailing incentives lead to both high-cost and low-cost firms to choose the same capital structure in equilibrium, thus decoupling the firm's choice of capital structure from its private information about its value.

PD March 1993. TI Rawlsian Optimal Population Size. AA Bellcore. SR Bellcore Economics Discussion Paper: 97; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE J13. KW Population Size. Endogenous Fertility. Bequests.
AB In this paper, I examine the implications of the Rawlsian maximin criterion for optimal population size and intergenerational allocation of resources when fertility is endogenous. I show that whenever children are better-off than their parent in laissez-faire, the size of the population and parental bequests are also optimal according to the Rawlsian Criterion. Otherwise, laissez-faire leads to overpopulation and suboptimal bequests. I then show that by using a proper price-based corrective policies, society can achieve a Rawlsian optimal allocation. These policies involve either a combination of a subsidy to aggregate future consumption and per capita tax on children, or a subsidy to average future consumption.

Spiller, Pablo
PD June 1993. TI Regulation without Commitment: Price Regulation of U.K. Utilities. AU Spiller, Pablo; Vogelsang, Ingo. AA Spiller: University of Illinois. Vogelsang: Boston University. SR Boston University Industry Studies Program Discussion Paper: 41; Department of Economics, Boston University, Boston, MA 02215. PG 28. PR no charge. JE L33, L51, L96. KW Regulatory Commitment. Price Regulation. Public Utilities. Price Caps.
AB Since public utility prices are politically very sensitive, regulatory discretion increases the risk of de-facto expropriating a utility's sunk costs. In the U.K. the lack of formal constitution protection against regulatory discretion and the party-in-power's control of both Parliament and of the executive could provide the government with substantial discretion over regulated utilities. How were, then, the Conservative governments of the 1980's able to privatize so many industries that continued to be government regulated? How could these companies command high share prices and undertake substantial new investments? The main thrust of this paper is that the answer to this puzzle resides in the subtle use of processes and other traditional institutional arrangements that substantially restrict regulatory discretion in the U.K. We show through simple theoretical model how the regulatory process in the U.K. provides investors with some commitment against unfair regulatory treatment. We show, furthermore, that the system also limits the potential for regulatory capture. By performing comparative statics, we explore the stability of regulatory outcomes, and the limits of regulatory commitment. A discussion of regulatory episodes since the privatization of British Telecom suggests that the regulatory process followed quite closely what could have been expected from our simple model of regulation.

Spulber, Daniel F.
TI Capital Structure With Countervailing Incentives. AU Spiegel, Yossef; Spulber, Daniel F.

Srinagesh, Padmanabhan
PD May 1992. TI A Dynamic Stochastic Model of Choice. AA Bellcore. SR Bellcore Economics Discussion Paper: 78; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE L96. KW Flat Rate Service.
AB This paper explains why cross-sectional data will reveal a "bias" toward Flat Rate Service in customer choice. Numerical simulations show that rational customers with uncertain demand who make a choice decision ex ante and a usage decision ex post will display this bias.

PD May 1992. TI Self Rationing with Nonlinear Prices. AA Bellcore. SR Bellcore Economics Discussion Paper: 79; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE D40. KW Nonlinear Pricing. Pricing Structure.
AB This paper is concerned with pricing problems that arise when a service and the capacity to consume that service are jointly sold to consumers with random demand. It builds on the work of Oren, Smith and Wilson (1985) and Panzar and Sibley (1978). We show that profit maximizing firms that can use fully nonlinear prices will satisfy the usual right end point condition: the last unit sold to the largest consumer will be marginally priced at marginal costs. We also provide conditions under which marginal prices exceed marginal cost. When the firm is restricted to using a partly nonlinear price structure, selling capacity at a linear price and the service itself at a nonlinear price, we show that marginal prices will generally lie below marginal cost over some portion of their domain. The intuition underlying this results can be found in the loss leader problem studies by Allen.

TI Telephone Company Entry into Cable Television: A Re-Evaluation. AU Goodman, Matthew; Lu, Kevin; Sharkey, William W.; Srinagesh, Padmanabhan; Stolleman, Neal.

TI Telephone Company Entry into Cable Television: A Re-Evaluation. AU Goodman, Matthew; Lu, Kevin; Sharkey, William W.; Srinagesh, Padmanabhan; Stolleman, Neal.

TI Multiproduct Nonlinear Pricing with Multiple Taste Characteristics. AU Sibley, David S.; Srinagesh, Padmanabhan.

Srinivasan, Kannan
TI Consumer Purchase Behavior in a Frequently Bought Product Category: Estimation Issues and Managerial Insights From a Hazard Function Model With Heterogeneity. AU Gonul, Fusun; Srinivasan, Kannan.

Srinivasan, T. N.
TI Dynamics of Endogenous Growth. AU Raut, Lakshmi K.; Srinivasan, T. N.

Staff of Tax Policy Division
PD August 1993. TI Technical Assistance on Tax Policy: A Review. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/93/65; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 30. PR not available. JE O19, H20, O53, O54, O55. KW Technical Assistance. Tax Policy.
AB This paper reviews recent experience of technical assistance on tax policy provided by the Fiscal Affairs Department to a selected but diversified group of countries that differ both in their geographical locations and in the nature of their economies. The review finds in the technical assistance advice both common themes applicable to all countries and special elements designed to address issues unique to a specific country, or a subset of countries. It also attempts to assess, to the extent possible, the policy impacts of such advice.

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

Stambaugh, Robert F.
PD August 1993. TI Estimating Conditional Expectations When Volatility Fluctuates. AA University of Pennsylvania and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 140; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. PG not available. PR $2.00. JE C13. KW Heteroskedasticity. GARCH Model.
AB Asymptotic variances of estimated parameters in models of conditional expectations are calculated analytically assuming a GARCH process for conditional volatility. Under such heteroskedasticity, OLS estimators of parameters in single-period models can possess substantially larger asymptotic variances than GMM estimators employing additional multiperiod moment conditions - an approach yielding no efficiency gain under homoskedasticity. In estimating models of long-horizon expectations, the VAR approach provides an efficiency advantage over long-horizon regressions under homoskedasticity, but that ordering can reverse under heteroskedasticity, especially when the conditional mean and variance are both persistent. In such cases, the VAR approach maintains a slight efficiency advantage if the OLS estimator is replaced by an alternative GMM estimator. Heteroskedasticity can increase dramatically the apparent asymptotic power advantages of long-horizon regressions to reject constant expectations against persistent alternatives.

Stapleford, John
TI The Regulation of Telecommunications and State Economic Growth. AU Bottorff, Peggy; Latham, William; Stapleford, John.

Stapleton, Richard C.
TI Idiosyncratic Risk, Sharing Rules and the Theory of Risk Bearing. AU Franke, Gunter; Stapleton, Richard C.; Subrahmanyam, Marti G.;

Stein, Jeremy C.
PD March 1993. TI Prices and Trading Volume in the Housing Market: A Model with Downpayment Effects. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 4373; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 32. PR $5.00. JE R31. KW Minimum Downpayment. House Prices. Time to Sale.
AB This paper presents a simple model of trade in the housing market. The crucial feature is that a minimum

downpayment is required for the purchase of a new home. The model has direct implications for the volatility of house prices, as well as for the correlation between prices and trading volume. The model can also be extended to address the correlation between prices and time-to-sale, as well as certain aspects of the cyclical behavior of housing starts.

Steindel, Charles

PD December 1992. TI Changes in the U.S. Cycle: Shifts in Capital Spending and Balance Sheet Changes. AA Federal Reserve Bank of New York. SR Federal Reserve Bank of New York Research Paper: 9224; Research Department - Room 901, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. PG 25. PR no charge. JE E21, E22, E32. KW Business Cycles. Capital Spending. Financial Markets.
AB This paper discusses some recent structural changes in the U.S. economy and their potential effects on the business cycle. Two major areas are discussed: 1. Shifts in the composition of capital spending. 2. The implications of recent financial market developments. Within the capital spending area, the shift to short-term equipment helped to moderate the 1990-91 recession and is a support to recovery forces, but in the long-run may accentuate the cycle. Increased trade in capital goods has reduced the effect of the U.S. capital goods cycle, and increased that of foreign nations, on the U.S. economy. In the financial market area, the process of balance sheet adjustment may have marred the recovery process, although it may have favorable long-run implications for moderation of the U.S. cycle. The apparent increased resistance of consumer spending to stock market changes would, if sustained, alter significantly the channels by which monetary policy is believed to affect the economy.

Stevens, Guy V. G.

PD August 1993. TI Internal Funds and the Investment Function. AA Board of Governors of the Federal Reserve System. SR Board of Governors of the Federal Reserve System International Finance Discussion Paper: 450; Division of International Finance, Board of Governors of the Federal Reserve System, Washington DC 20551. PG 32. PR no charge. JE E22, D24, G31. KW Investment Function. Internal Funds.
AB An extensive and increasingly persuasive body of empirical evidence has linked a firm's fixed investment expenditure to its supply of internally generated funds. The central concerns of this paper are (1) the theoretical justifiability of such empirically-based investment functions, particularly those where internal funds affect only the speed of adjustment, and (2) the dynamic properties of this latter class of investment functions. A class of models is explored featuring intertemporal profit maximization under conditions of increasing costs of external finance (attributable to bankruptcy or agency costs). The paper shows that, for a major part of the optimal investment path, the function implied by the theory is remarkably close to the most promising variant found empirically: the supply of internal funds affects the speed of adjustment, but not the level of the optimal capital stock. Such investment functions possess the unusual dynamic property that the speed of adjustment increases monotonically along the optimal path.

Stinchcombe, Maxwell B.

TI Optimal Monitoring of Oil Spills: Control in a Stochastic, Dynamic Context. AU Groves, Theodore; Stinchcombe, Maxwell B.; Viladrich, Montserrat.

Strand, Ivar E.

TI Natural Resource Damage Assessment: Economic Implications for Fisheries Management. AU Hanemann, W. Michael; Strand, Ivar E.

Stulz, Rene M.

TI Tobin's Q, Corporate Diversification and Firm Performance. AU Lang, Larry H. P.; Stulz, Rene M.

Subrahmanyam, Marti G.

TI Idiosyncratic Risk, Sharing Rules and the Theory of Risk Bearing. AU Franke, Gunter; Stapleton, Richard C.; Subrahmanyam, Marti G.;

TI Idiosyncratic Risk, Sharing Rules and the Theory of Risk Bearing. AU Franke, Gunter; Stapleton, Richard C.; Subrahmanyam, Marti G.;

Swamy, P. A. V. B.

PD August 1993. TI Exchange Rate Episodes and the Passthrough of Exchange Rates to Import Prices. AU Swamy, P. A. V. B.; Thurman, Stephen S. AA Swamy: Board of Governors of the Federal Reserve System. Thurman: O. E. C. D., Paris. SR Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 93-25; C/O Simon G. Gilchrist, Stop 61, Federal Reserve Board, Washington, DC 20551. PG 12. PR no charge. JE F31. KW Exchange Rates. Import Prices. Passthrough. Concomitant Variables.
AB This study uses a variable coefficient estimator with concomitant variables to examine the episodical variation of the passthrough of exchange rate and foreign cost changes to import prices. The results strongly support the hypothesis that this passthrough to domestic import prices is stronger during periods of pronounced episodes of exchange rate depreciation and low foreign firm profit margins, and is weakened considerably during prolonged periods of exchange rate appreciation and build-up of foreign firm profit margins.

Swanson, Norman R.

PD November 1992. TI Impulse Response Functions Based on a Causal Approach to Residual Orthogonalization in Vector Autoregressions. AU Swanson, Norman R.; Granger, C. W. J. AA University of California, San Diego. SR University of California, San Diego Department of Economics Working Paper: 92-50; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. PG 35. PR $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. JE C32, C13, E27, E47. KW VAR. Structural Models. Variance Decomposition.
AB Is there an easy way to model the contemporaneous correlation which is often found to be represented among the errors of vector autoregression (VAR) and error correction (EC) models? In this paper, a simple method for specifying structural models of the errors in VAR models is discussed using well known graph-theoretic techniques that can be traced back at least as far as Wright (1921). This method essentially involves

analysis of the overidentifying restrictions implied by various structural models. Results presented in this paper draw primarily on recent work in the area of causal modeling by Glymour, Scheines, Spirtes, and Kelly (1987); Glymour and Spirtes (1988); as well as Judea Pearl and T.S. Verma (1991). The specification method requires only the covariance matrix of the residuals as input. It is shown that recursive (and non recursive) structural models of the errors in VAR models imply a finite set of overidentifying constraints which can easily be tested. In this manner, a priori knowledge of a structural model for the error can be compared to the properties exhibited by the data. Thus, this method may provide a sensible, data-determined ordering of the variables for impulse response and forecast error variance decomposition analyses. A possible explanation for the presence of contemporaneous correlation between the errors in VAR models is also given. The explanation relies on the fact that uni-directional (Granger) causality in the presence of aggregation can results in the appearance of systematic contemporaneous correlation among errors in a system that has uncorrelated errors at the "natural" time interval. Two.

TI   An Introduction to Stochastic Unit Root Processes.
AU   Granger, C. W. J.; Swanson, Norman R.

Swierzbinski, J.
TI   Focal Points and Bargaining. AU   Binmore, Ken; Swierzbinski, J.; Hsu, S.; Proulx, C.

Taub, Bart
TI   On Resolving the One-Shot Prisoners' Dilemma Through Probabilistic Cheap Talk. AU   Chakravorti, Bhaskar; Conley, John P.; Taub, Bart.

TI   Economic Applications of Probabilistic Cheap Talk.
AU   Chakravorti, Bhaskar; Conley, John P.; Taub, Bart.

Taylor, Mark P.
TI   The Stabilizing Effect of the ERM on Exchange Rates and Interest Rates: An Empirical Investigation. AU   Artis, Michael J.; Taylor, Mark P.

Thaler, Richard H.
TI   Myopic Loss Aversion and the Equity Premium Puzzle.
AU   Benartzi, Shlomo; Thaler, Richard H.

Thomas, Alun H.
PD   August 1993. TI   Saving, Investment, and the Regional Current Account: An Analysis of Canadian, British, and German Regions. AA   International Monetary Fund. SR   International Monetary Fund Working Paper: WP/93/62; International Monetary
Fund, 700 19th Street, Washington, DC 20431. PG   14. PR   not available. JE   E21, E22, F32, D92. KW   Capital Mobility. Corporate Liquidity Constraints.
AB   The relationship between regional saving and investment is examined to measure the extent of capital mobility. The relationship between total regional saving and investment is significantly negative in Canada and the United Kingdom, in contrast to the significant positive relationship found across countries. The difference is attributed to government subsidies to poor regions. The relationship between personal saving and private investment is insignificant in the U.K. and Germany and is negative in Canada which suggests that capital is mobile for

individuals. The relationship between retained earnings and private investment is significantly positive in the U.K. and Canada suggesting capital immobility for firms but a test for the presence of regional corporate liquidity constraints yields no effects.

Thomas, Charles P.
PD   September 1993. TI   The Role of Fiscal Policy in an Incomplete Markets Framework. AA   Board of Governors of the Federal Reserve System. SR   Board of Governors of the Federal Reserve System International Finance Discussion Paper: 451; Division of International Finance, Board of Governors of the Federal Reserve System, Washington DC 20551. PG   32. PR   no charge. JE   D52, E12, E62. KW   Incomplete Markets. Keynesian Models. FIscal Policy.
AB   A general equilibrium model is developed to highlight the link between neo-Keynesian models of unemployment and recent results on the constrained suboptimality of competitive economies with incomplete asset markets. Although the model deviates from the Arrow-Debreu paradigm only by the absence of some contingent claims, the competitive equilibrium exhibits under-employment and balanced-budget fiscal policies have Keynesian effects which are Pareto improving.

Thomas, Duncan
TI   Does Head Start Make a Difference? AU   Currie, Janet; Thomas, Duncan.

Thornton, James R.
TI   Limited-Liability and the Design of Incentive Schemes Under Risk-Neutrality. AU   Brown, Pamela Clark; Miller, Jeffrey B.; Thornton, James R.

Thurman, Stephen S.
TI   Exchange Rate Episodes and the Passthrough of Exchange Rates to Import Prices. AU   Swamy, P. A. V. B.; Thurman, Stephen S.

Tinsley, P. A.
TI   Interest Rate Policies for Price Stability. AU   Brayton, Flint; Tinsley, P. A.

Tommasi, Mariano
PD   November 1993. TI   High Inflation: Resource Misallocations and Growth Effects. AA   University of California, Los Angeles. SR   University of California at Los Angeles Department of Economics Working Paper: 704; Department of Economics, University of California at Los Angeles, 2263 Bunche, Los Angeles, CA 90024. PG   14. PR $5.00. JE   D83, D92, E31. KW   Search. Resource Allocation. Growth.
AB   Rapid inflation induces buyers to speed up purchases, inhibiting the selection of more adequate trading partners through search. This has the effect of blurring the distinction across agents of different productivities, and leads to resource misallocations. The incentives to become more efficient are thus discouraged, and lower growth results.

Vahid-Araghi, Farshid
TI   Short-Run Forecasts of Electricity Loads and Peaks.
AU   Engle, Robert F.; Granger, C. W. J.; Ramanathan, Ramu; Vahid-Araghi, Farshid; Brace, Casey.

van den Brink, Rene

PD January 1992. TI A Social Power Index for Hierarchically Structured Populations of Economic Agents. AU van den Brink, Rene; Gilles, Robert P. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-01; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE D11. KW Hierarchy. Communication. Social Structure.

AB This paper presents a model of a finite collection of socially related economic agents. We assume that an agent in an economy is part of some social structure in which he might dominate some agents while he himself is dominated by other agents. We consider structures in which these social relations between the agents have some special features. Such a group of agents endowed with a social structure is called a hierarchically structured population. We identify two types of social differences between economic agents in a hierarchically structured population. First we show that the agents can be subdivided into groups that can be ordered such that agents in "higher" groups dominate agents in "lower" groups. Secondly we show that the communication structure between the agents, in general, will be incomplete. These social differences lead to different potential influences agents have on economic processes. We introduce an index that measures this potential influence.

PD May 1992. TI Axiomatizations of the Conjunctive Permission Value for Games with Permission Structure. AU van den Brink, Rene; Gilles, Robert P. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-09; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE C71. KW Cooperative Games. Limited Cooperation. Permission Structure.

AB A situation in which players can generate certain pay-offs by cooperating can be described by a cooperative game with transferable utilities. In this paper we assume that the players who are participating in such a game, are part of some permission structure. This means that there are players who need permission from one or more other players before they can act or cooperate with other players to generate some pay-off. It is clear that such a permission structure limits the possibilities of cooperation. We derive a modified game that takes account of these limited cooperation possibilities. We then give axiomatic characterizations of the Shapley value of this modified game.

PD June 1992. TI Measuring the Dominance Power of Nodes in Directed Graphs. AU van den Brink, Rene; Gilles, Robert P. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E92-15; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE C60, C44. KW Graph Theory. Dominance Structure.

AB A directed graph (N,R) can be interpreted as a dominance structure such that the arcs in R represent a dominance relation between the nodes in N. A power measure is a function that assigns to each node in a directed graph a value representing the "dominance power" of that node with respect to the other nodes in graph. We present and axiomatically characterize two such power measures, the BG-measure and the well known score-measure. A weighted directed graph can be interpreted as a dominance structure whose dominance relations are assigned weights representing the "importance" of each relation. We give generalizations of the BG- and score-measures to the class of weighted directed graphs and give axiomatic characterizations of these generalized measures.

PD May 1993. TI Ranking the Nodes in Direct and Weighted Directed Graphs. AU van den Brink, Rene; Gilles, Robert P. AA Virginia Polytechnic Institute and State University. SR Virginia Polytechnic Institute and State University Working Paper in Economics: E93-10; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. PG not available. PR no charge. JE C44, C60. KW Graph Theory. Dominance Relations.

AB A directed graph (N,D) can be interpreted as a hierarchical organization of the nodes in N in which the arcs in D represent dominance relations between these nodes. A ranking procedure is a mapping that assigns to every digraph a ranking or ordering of the nodes such that nodes that are ranked "higher" are more important in the organization than nodes that are ranked "lower". In this paper we axiomatize the ranking procedure that is based on the score-measure. In this ranking procedure a node is "better" the more other nodes it dominates.

Van Dijk, N. M.

TI An Experimental Analysis of Steady State Convergence in Simple Queuing Systems: Implications for FMS Models. AU Nuyens, R. P. A.; Van Dijk, N. M.; Van Wassenhove, Luk N.; Yucesan, E.

Van Nunen, J.

TI Planning KLM's Aircraft Maintenance Personnel. AU Van Wassenhove, Luk N.; Van Nunen, J.; Dijkstra, Matthijs C.; Kroon, Leo G.; Salomon, Marc.

Van Wassenhove, Luk N.

TI Budget Allocation Policies for Site Decontamination: A Mathematical Programming Approach. AU Corbett, Charles J.; Debets, Frank J. C.; Van Wassenhove, Luk N.

TI Batching Decisions: Structure and Models. AU Kuik, Roelof; Salomon, Marc; Van Wassenhove, Luk N.

TI The Green Fee. AU Corbett, Charles J.; Van Wassenhove, Luk N.

TI An Integrated and Structured Approach to Improve Maintenance. Part I: Concepts. AU Vanneste, S. G.; Van Wassenhove, Luk N.

TI An Integrated and Structured Approach to Improve Maintenance. Part II; Application. AU Vanneste, S. G.; Van Wassenhove, Luk N.

TI An Experimental Analysis of Steady State Convergence in Simple Queuing Systems: Implications for FMS Models. AU Nuyens, R. P. A.; Van Dijk, N. M.; Van Wassenhove, Luk N.; Yucesan, E.

PD not available. TI Planning KLM's Aircraft Maintenance Personnel. AU Van Wassenhove, Luk N.; Van Nunen, J.; Dijkstra, Matthijs C.; Kroon, Leo G.; Salomon,

Marc. AA Van Wassenhove: INSEAD. Dijkstra, Kroon, Van Nunen and Salomon: Erasmus University. SR INSEAD Working Papers: 93/03/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 9. PR not available. JE C63, C88, M12. KW Decision Support Systems. Capacity Planning Problems.

AB A Decision Support System (DSS) has been developed for the aircraft maintenance department of KLM Royal Dutch Airlines at Schiphol Airport. The aircraft maintenance department is responsible for carrying out inspections on aircraft during their ground time at the airport. The main resource of the department is its workforce. Since January 1990 the DSS has supported the management in analyzing several capacity planning problems related to the size and organization of the workforce. In particular, the DSS is used to determine the appropriate number of maintenance engineers and their training requirements. Furthermore, the DSS is used to analyze the efficiency and effectiveness of the maintenance department.

TI A Comparison of Experienced American and European Manufacturers with Third Party Logistics Services. AU Lieb, Robert C.; Millen, Robert A.; Van Wassenhove, Luk N.

TI The Impact of Knowledge on Quality. AU Mukherjee, Amit S.; Van Wassenhove, Luk N.

Vanhonacker, Wilfried R.
PD February 1993. TI What Does the Multinomial Logit Model Really Measure? AA INSEAD. SR INSEAD Working Papers: 93/26/EPS/MKT/SM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 15. PR not available. JE C35. KW Consideration Set. Discrete Choice.

AB The Multinomial Logit Model of choice has been used extensively in the literature. The traditional interpretation is that the model describes the probability of choosing a specific alternative out of given set of considered alternatives (the "consideration set"). This paper shows that when the decision maker experiences uncertainty in defining the consideration set, the choice model is still MNL under relatively weak assumptions. However, in such instances, one cannot disentangle in the actual MNL predictions what comes from real preferences and what comes from characteristics of the imperfectly carried out consideration set generation task. This observation has important practical implications, since implied marketing efforts differ substantially depending on whether they aim at adaptation to preferences or at manipulation of the consideration set generation.

Vanneste, S. G.
PD July 1993. TI An Integrated and Structured Approach to Improve Maintenance. Part I: Concepts. AU Vanneste, S. G.; Van Wassenhove, Luk N. AA Vanneste: Tilburg University. Van Wassenhove: INSEAD. SR INSEAD Working Papers: 93/49/MKT; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 15. PR not available. JE M11, L10. KW Maintenance Theory. Decision Support Technology.

AB Following a brief review of recent developments in maintenance theory and practice, and in information technology and decision support models, we present an integrated approach that combines elements from these domains into a powerful tool for dealing with maintenance problems. We show how this framework can be used to set up a continuous improvement program for maintenance management. A companion paper (Part II) applies the concepts to to an industrial case.

PD July 1993. TI An Integrated and Structured Approach to Improve Maintenance. Part II; Application. AU Vanneste, S. G.; Van Wassenhove, Luk N. AA Vanneste: Tilburg University. Van Wassenhove: INSEAD. SR INSEAD Working Papers: 93/50/TM; INSEAD, Boulevard de Constance, Fontainebleau, 77305 Cedex, FRANCE. PG 12. PR not available. JE M11, L10. KW Maintenance Theory. Decision Support Technology.

AB To test our ideas in practice, we implemented the concepts of Part I of this paper at three industrial sites. In one of them, there was a very clear need for improving reliability and availability since demand exceeded capacity. At this plant, the eight phase approach was fully implemented. In this paper, we report on our experiences with this implementation and illustrate how our concepts can be applied. Experiences with the other sites are only mentioned in case of notable differences. The paper starts with a description of the planet. The application of our concepts is discussed in Section 2.

Venkatraman, N.
TI Configurations of Inter-Organizational Relationships: A Comparison Between U.S. and Japanese Automakers. AU Bensaou, M.; Venkatraman, N.

Viladrich, Montserrat
TI Optimal Monitoring of Oil Spills: Control in a Stochastic, Dynamic Context. AU Groves, Theodore; Stinchcombe, Maxwell B.; Viladrich, Montserrat.

Villa, P.
PD July 1993. TI Offre et Demand d'investissement: le role des profits. AA INSEE. SR Unite de Recherche Document de Travail ENSAE/INSEE: 9330; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. PG 28. PR no charge. JE E20, E22. KW Profits. Investment.

AB Profits as an explanatory variable of investment are a sort of come-back because of empirical reasons, to the specifications initiated by Jorgenson. Their importance leads to the theory of "profitability" according to which firms have an investment demand, depending on the ratio rate of return at full capacity to the interest rate. On the other side, the theory of financial constraints leads a supply of investment depending on "effective profits", on the "ratio of indebtedness and on the expected real interest rate. The paper aims at estimating a disequilibrium macroeconomic model of investment. We compare three methods: "interated least squares", "iterated full information likelihood" and "simulated pseudo maximum likelihood at the second order". Some results are robust to the changing of method: the importance of "realised profits", of interest rates, user cost of capital, and aggregate demand. The financial constraints are not necessarily binding when the debt ratio is high. The spillover of the constraint is not stable when changing the method. This paper is written in French.

Villanueva, Delano
PD September 1993. TI Options for Monetary and Exchange Arrangements in Transition Economies. AA International Monetary Fund. SR International

Monetary Fund Papers on Policy Analysis and Assessment: PPAA/93/12; International Monetary Fund, Washington, DC 20431. PG 20. PR not available. JE E42, E58, F31. KW Economic Transition. Exchange Rates. Monetary System. AB This paper considers two interrelated decisions that the authorities in transition economies need to take once they have decided to introduce their own national currency. First, the exchange rate regime, that is, the decision whether to peg or to float the exchange rate for the currency, the modalities for implementing this decision, and rules regarding the currency's convertibility into foreign currency; and second, the arrangements for the central monetary institution, including the degree of discretion that it should exercise in setting rates of domestic credit expansion.

Vishny, Robert W.
TI Corruption. AU Shleifer, Andrei; Vishny, Robert W.

Vogelsang, Ingo
TI Regulation without Commitment: Price Regulation of U.K. Utilities. AU Spiller, Pablo; Vogelsang, Ingo.

Von Bismarck, Gottfried
TI From Kombinat to Private Enterprise: Two Case Studies in East German Privatization. AU Carlin, Wendy; Bischof, Robert; Von Bismarck, Gottfried.

Wang, Yong
TI The Real Value of Money Under Endogenous Beliefs. AU Bertocchi, Graziella; Wang, Yong.

Weil, David N.
TI Saving and Growth: A Reinterpretation. AU Caroll, Christopher D.; Weil, David N.

Weiss, Yoram
PD August 1993. TI The Formation and Dissolution of Families: Why Marry? Who Marries Whom? And What Happens Upon Marriage and Divorce. AA Tel-Aviv University and Economic Research Center/NORC. SR Economics Research Center/NORC Discussion Paper: 92-7; Economics Research Center/NORC, 6030 S. Ellis, CHICAGO, Illinois 60637. PG 67. PR $2.00 from the NORC librarian. JE J10, J12, A13. KW Marriage. Divorce.
AB This survey summarizes the main ideas that economists bring to the analysis of marriage and divorce. The new perspective of economists is that marriage, when viewed as a voluntary union of rational individuals, is subject to the same tools of analysis as other economic phenomena. In particular, economists rely heavily the similarity between the job market where workers and firms combine to produce marketable goods, and the marriage market where husbands and wives combine to produce non marketable household goods. In both cases the forces of competition determine the assignment and the associated division of the proceeds between the partners. This survey does not enumerate individual contributions and does not summarize empirical findings. Instead, the reader is exposed to the main ideas in an integrated fashion, using simple models. It is my belief that such a presentation of the literature can be useful to graduate students and researchers who wish to get acquainted with what can economics say on "non-economic" subjects such as marriage and divorce. The survey covers the following topics: gains from marriage, resource allocation within the family and the role of altruism, assortative matching, search for a mate and divorce.

TI Social Status, Education and Growth. AU Fershtman, Chaim; Murphy, Kevin M.; Weiss, Yoram.

Wenniger, John
PD December 1992. TI Federal Reserve Operating Procedures and Institutional Change. AU Wenniger, John; Lee, William. AA Federal Reserve Bank of New York. SR Federal Reserve Bank of New York Research Paper: 9223; Research Department - Room 901, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. PG 43. PR no charge. JE E58, E52. KW Central Bank. Reserve Base. Federal Funds Rate.
AB In this paper, we review the implications of institutional change for the Federal Reserve's operating procedures both from a historical perspective and from the perspective of recent developments such as the unusual weakness in M2, the "credit crunch", the downsizing of the banking system, and the closing of failed depository institutions. The results do not yield a clear conclusion regarding whether it would be better for the Federal Reserve to use the federal funds rate or the reserve base as its instrument variable. However, effective use of the reserve base in the future would probably require changing the current institutional arrangements for reserve requirements which are still largely geared for M1 control.

West, Kenneth D.
PD July 1993. TI Some Evidence on Finite Sample Behavior of an Instrumental Variables Estimator of the Linear Quadratic Inventory Model. AU West, Kenneth D.; Wilcox, David W. AA West: University of Wisconsin and National Bureau of Economic Research. Wilcox: Board of Governors of the Federal Reserve System. SR National Bureau of Economic Research Technical Paper: 139; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. PG not available. PR $2.00. JE C10, C13, E22. KW Finite Samples. Distribution. Asymptotic Theory.
AB We evaluate some aspects of the finite sample distribution of an instrumental variables estimator of a first order condition of the Holt et al. (1960) linear quadratic inventory model. We find that for some but not all empirically relevant data generating processes and sample sizes, asymptotic theory predicts a wide dispersion of parameter estimates, with a substantial finite sample probability of estimates with incorrect signs. For such data generating processes, simulation evidence suggests that different choices of left hand side variables often produce parameter estimates of an opposite sign. More generally, while the asymptotic theory often provides a good approximation to the finite sample distribution, sometimes it does not.

PD September 1993. TI Inventory Models. AA University of Wisconsin and National Bureau of Economic Research. SR National Bureau of Economic Research Technical Paper: 143; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. PG not available. PR $2.00. JE E22, C13, C12. KW Inventories. Instrumental Variables. Unit Root.
AB Econometric aspects of recent research on inventory models are surveyed. The discussion emphasizes issues relevant to instrumental variables estimation of a first order

condition of the Holt et al. (1960) linear quadratic inventory model, including choice of instruments, covariance matrix estimation, methods for testing, and implications of unit root nonstationarity. The paper also briefly discusses estimation of a decision rule implied by the model, and, finally, the implications for inventory models of some stylized facts about inventories.

PD September 1993. TI Automatic Lag Selection in Covariance Matrix Estimation. AU West, Kenneth D.; Newey, Whitney K. AA West: University of Wisconsin and National Bureau of Economic Research. Newey: Massachusetts Institute of Technology. SR National Bureau of Economic Research Technical Paper: 144; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. PG not available. PR $2.00. JE C14, C15. KW Nonparametric Methods. Covariance Matrix.
AB We propose a nonparametric method for automatically selecting the number of autocovariances to use in computing a heteroskedasticity and autocorrelation consistent covariance matrix. For a given kernel for weighting the autocovariances, we prove that our procedure is asymptotically equivalent to one that is optimal under a mean squared error loss function. Monte Carlo simulations suggest that our procedure performs tolerably well, although it does result in size distortions.

Weymark, John A.
TI Strategy-Proof Social Choice with Continuous Separable Preferences. AU Le Breton, Michel; Weymark, John A.

White Michelle
TI A Comparison of Formal and Informal Dispute Resolution in Medical Malpractice. AU Farber, Henry S.; White Michelle.

White, Halbert

TI Asymptotic Properties of Some Projection-Based Robbins-Monro Procedures in a Hilbert Space. AU Chen, Xiaohong; White, Halbert.

TI Information Criteria for Selecting Possibly Misspecified Parametric Models. AU Sin, Chor-Yiu; White, Halbert.

PD January 1993. TI M-Testing Using Finite and Infinite Dimensional Parameter Estimators. AU White, Halbert; Hong, Yongmiao. AA University of California, San Diego. SR University of California, San Diego Department of Economics Working Paper: 93-01; Working Paper Coordinator, Economics Department, 0508, University of California, 9500 Gilman Drive, La Jolla, CA 92093-0508. PG 30. PR $3.00 U.S.; $4.00 Foreign; payable to Regents, University of California. JE C12, C13, C14. KW Consistent Tests. Kernel Estimation. Specification Tests.
AB This paper proposes an m-testing framework using infinite dimensional nuisance and non-nuisance parameters as well as finite dimensional parameters. Nonparametric estimators for infinite dimensional non-nuisance parameters affect the limiting distribution of the m-test statistic and its convergence rate. We treat two leading cases, called first and second order m-testing. In the first case, the moment function does not vanish identically under the null hypothesis; here we extend Whang and Andrews' (1991) m-testing framework to allow infinite dimensional non-nuisance parameters to enter the

moment function. In the second case, the moment function vanishes as the true parameters under the null hypothesis; here we generalize results of Hong and White (1991) and develop a new class of m-tests. These new m-tests are often consistent against any form of misspecification. They are expected to have good power in finite samples, because the new statistics grow at a rate faster than the parametric rate under misspecification. Our framework can be used to test parametric and semiparametric models, and hypotheses about nonparametric models against various alternatives. Applications to both nonparametric series and kernel estimators are given. A number of tests are developed as illustrative examples.

Wilcox, David W.
TI Some Evidence on Finite Sample Behavior of an Instrumental Variables Estimator of the Linear Quadratic Inventory Model. AU West, Kenneth D.; Wilcox, David W.

Wilkie, Simon
TI Credible Implementation. AU Chakravorti, Bhaskar; Wilkie, Simon; Corchon, Luis C.

PD August 1992. TI On the Set of Pareto Efficient Allocations in an Economy with Public Goods. AU Wilkie, Simon; Diamantrias, Dimitrios. AA Wilkie: Bellcore. Diamantrias: Temple University. SR Bellcore Economics Discussion Paper: 77; Room 2Q-338, Bellcore, 445 South Street, Morristown, New Jersey 07962-1910. PG not available. PR not available. JE D61, H41. KW Public Goods. Efficiency.
AB We examine the set of efficient allocations in economies with public goods. We show that even if preferences are continuous are strongly monotonic, it does not coincide with the set of weakly efficient allocations. We then study topological properties of the Pareto set. We show that it is neither connected nor closed in allocation space. Furthermore, if the public goods are local, the attainable set in utility space need not be closed or connected. We then provide two independent sufficient conditions for the closedness of the Pareto set. The results are directly applicable to private private goods economies with joint production. Our results should be of interest for general equilibrium and mechanism design theory; where for example, proving existence of an equilibrium and the study of the properties of monotone-path social choices correspondences, the properties of the efficient set are important.

Willard, Kristen L.
TI Financial Market Interpretations of Civil War News. AU Guinnane, Timothy W.; Rosen, Harvey S.; Willard, Kristen L.

Wizman, Thierry A.
TI Intertemporal Asset Pricing Models and the Cross Section of Expected Stock Returns. AU Hardouvelis, Gikas A.; Kim, Dongcheol; Wizman, Thierry A.

Wolken, John D.
TI The Demand for Trade Credit; An Investigation of Motives for Trade Credit Use by Small Businesses. AU Elliehausen, Gregory E.; Wolken, John D.

Wood, Peter
TI   The Creation and Growth of Small Business Service Firms in Post-Industrial Britain. AU   Bryson, John; Wood, Peter; Keeble, David.

Wyplosz, Charles
TI   The Unstable EMS. AU   Eichengreen, Barry; Wyplosz, Charles.

Yucesan, E.
TI   An Experimental Analysis of Steady State Convergence in Simple Queuing Systems: Implications for FMS Models. AU   Nuyens, R. P. A.; Van Dijk, N. M.; Van Wassenhove, Luk N.; Yucesan, E.

Yuengert, Andrew M.
PD   May 1993. TI   The Measurement of Efficiency in Life Insurance Estimates of a Mixed Normal-Gamma Error Model. AA   Federal Reserve Bank of New York. SR   Federal Reserve Bank of New York Research Paper: 9308; Research Department - Room 901, Federal Reserve Bank of New York, 33 Liberty Street, New York, NY 10045. PG   20. PR   no charge.   JE   C21, L84.   KW   Efficiency. Maximum Likelihood. Financial Services.
AB   This paper make three contributions to the literature on efficiency in financial services. First, it presents estimates of a mixed error cost frontier in which the variances of both the normal and gamma distributions are allowed to vary with firm size. Second, it extends the literature on life insurance scale and product mix economies by incorporating and measuring x-inefficiency. Estimates of x-inefficiency, ranging from 35 to 50%, are significant, although the differences in x-inefficiency by firm size are insignificant. Normally distributed, white noise error has a standard deviation 40% larger than average x-inefficiency. The estimates provide evidence of ray scale economies up to $15 billion in assets; there is no evidence of scope economies. Third, comparisons of normal-gamma estimates with other efficiency measurement methods demonstrate some of the other methods' pitfalls: thick frontier and data envelopment analysis are inaccurate when estimation errors are heteroskedastic, and when symmetric, white noise errors are large relative to x-inefficiency.

Zame, William R.
TI   Debt Constraints and Equilibrium in Infinite Horizon Economies with Incomplete Markets. AU   Levine, David K.; Zame, William R.

Zapater, Inigo
TI   Communication and Coordination in Signalling Games: An Experimental Study. AU   Sopher, Barry; Zapater, Inigo.

Zeckhauser, Richard
TI   The Effect of State Tort Reform Legislation on Liability Insurance Losses and Premiums. AU   Blackmon, Glenn; Zeckhauser, Richard.

Zhuanxin, Ding
TI   Varieties of Long Memory Models. AU   Granger, C. W. J.; Zhuanxin, Ding.