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)

Abbott, Thomas A.

PD August 1990. **TI** The Classification of Manufacturing Industries: An Input-Based Clustering of Activity. **AU** Abbott, Thomas A.; Andrews, Stephen H. **AA** Abbott: Rutgers University. Andrews: Bureau of the Census. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 90-7; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 22. **PR** no charge. **JE** L60, C81, C43. **KW** Manufacturing. Aggregation. Micro Data.

AB The classification and aggregation of manufacturing data is vital for the analysis and reporting of economic activity. Most organizations and researchers use the Standard Industrial Classification (SIC) system for this purpose. This is, however, not the only option. Our paper examines an alternative classification based on clustering activity using production technologies. While this approach yields results which are similar to the SIC, there are important differences between the two classifications in terms of the specific industrial categories and the amount of information lost through aggregation.

Adelman, Irma

PD March 1991. **TI** Using SAM's to Account for Distortions in Non-Market Economies. **AU** Adelman, Irma; Berck, Peter; Vujovic, Dusan. **AA** Adelman and Berck: University of California, Berkeley. Vujovic: University of Belgrade. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 591; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 38. **PR** $7.60. **JE** O11, P24, P26, H61. **KW** Social Accounting Matrix. Economic Development. National Accounts.

AB The use of non-market mechanisms for allocative and distributive purposes is common in both developing and socialist economies. It gives rise to hidden flows not captured in the market-based statistical methodology of national accounts, material products, input-output tables, or social accounting matrices. The present paper provides an operational framework for quantifying the magnitude of these hidden flows and their percolation throughout the economy: Once the price equivalents of the non-market controls are calculated, a social accounting matrix (SAM) framework is used to trace the distribution of the hidden flows to which the non-market constraints give rise among all the institutional actors in the economy. The methodology is illustrated by reference to Yugoslavia as of 1987.

PD March 1991. **TI** The Relevance of ALDI for Sub-Saharan Africa. **AU** Adelman, Irma; Vogel, Steven J. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 590; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 24. **PR** $5.00. **JE** O13, O14, O55. **KW** Agricultural Development. Industrialization. Economic Development. Agriculture. Africa.

AB In the first two sections of this paper, we discuss the intellectual sources of the general neglect of agriculture in development policy. These are divided into theoretical and empirical propositions. The third section is devoted to a presentation of the general arguments for the adoption of an Agricultural Development Led Industrialization (ADLI) Strategy. The following two sections examine the applicability of these arguments to sub-Saharan Africa. First, some evidence in favor of the applicability of the strategy to sub-Saharan Africa is presented. Then, some special African issues are raised which require policy measures to generalize the applicability of ADLI to sub-Saharan Africa.

PD March 1991. **TI** Long Term Economic Development. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 589; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 31. **PR** $6.20. **JE** N10, O11, O14. **KW** Economic Development. Economic Growth. Developing Countries. Industrial Revolution.

AB The present paper analyzes the main features of long-term economic performance of developed and developing countries since industrial revolution. It is divided into epochs, distinguished by the global trade and payments regime and by common general characteristics of the process of long-term economic growth.

PD March 1991. **TI** Financial Considerations of Public Inventory Holdings in Developing Countries. **AU** Adelman, Irma; Berck, Peter. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 588; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 21. **PR** $5.00. **JE** Q18, Q11, Q14. **KW** Developing Countries. Public Finance. Food Policy. Asset Markets. Agriculture.

AB Food-security enhancing buffer stocks are usually analyzed as projects, to be compared to other feasible projects, but they are also assets like stocks and bonds and can be compared to other feasible assets, while projects can only be compared to specified alternatives, including of course, the no

action alternative. The theory of finance accounts for risk in a very general setting, while projects are typically evaluated for risk on the basis of stochastic simulations. Thus the assets market view of food stocks provides a powerful new tool of food-security analysis. In this paper, we propose a much simpler and theoretically better justified exercise - the evaluation of a buffer stock as a financial asset.

PD March 1991. **TI** Development Strategies and the Environment. **AU** Adelman, Irma; Fetini, Habib. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 587; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 43. **PR** $8.60. **JE** Q15, O13, Q24, Q20. **KW** Developing Countries. Economic Development. Environmental Policy. Pollution. Agriculture.
AB Are there systematic associations between environmental conditions and development strategies? There are reasons to expect that there might be, in view of the fact that development strategy choices influence variables which, in turn, influence environmental conditions. In particular, development strategies affect the structure of domestic production, the nature of the most binding constraints facing the economy, technological and investment choices, institutional structures, income distribution, and domestic relative to international prices. These variables affect energy consumption and patterns of land use in the agricultural system, which, in turn, affect the extent of environmental degradation.

PD March 1991. **TI** Designing Gradual Transition to Market Economies. **AU** Adelman, Irma; Berck, Peter; Vujovic, Dusan. **AA** Adelman and Berck: University of California, Berkeley. Vujovic: University of Belgrade. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 586; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 44. **PR** $8.80. **JE** P51, P21, P23, O21. **KW** Market Economies. Socialist Economy. Socialism.
AB The dilemma of transition from socialist to market economies consists of overcoming not only the ideological barriers to the transition but also the real dislocations involved. On the one hand, an abrupt transition is desirable in order to achieve a consistent set of prices, incomes, and resource allocation; on the other, it is feared that such a transition may result in economic chaos in the short-run, since the resource allocation, income distribution, and price solution of the current system may be very far from those of a market-allocation and market-price system. A theory of gradual transition from socialism to market economy is proposed which proceeds in two steps: in the first step, all allocations and targets in the socialist economy are converted into their subsidy-and-tax price equivalents in a market economy that reproduces the existing socialist solution. In the second step, the subsidy-and-tax equivalents associated with a target profile of the market economy are calculated and a gradual approach to these target subsidies-and-taxes is devised.

PD April 1991. **TI** The Use of Farm Level Data for Policy Analysis. **AU** Adelman, Irma; Taylor, J. Edward. **AA** Adelman: University of California at Berkeley. Taylor: University of California at Davis. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 597; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 135. **PR** $27.00. **JE** Q12, Q11, Q18. **KW** Economic Development. Agriculture. Agricultural Policy. Farm Households.
AB The planner is often hampered by a lack of adequate information when formulating policies for the economic development. Nowhere is this more apparent than in designing policies for the agrarian sector where the absence of econometric estimates of critical parameters often does not permit one to predict even the direction of the impact of crucial policy interventions. This is so because a large proportion of village economic activity is in family farms. The semi-commercial nature of family farms results in production and consumption decisions being combined in the same unit. This fact, in turn, makes the signs of some response elasticities to certain critical price changes ambiguous without numerical estimates of the magnitudes of price and income effects which go in opposite directions. The higher the proportion of agricultural activity that is in small family farms as opposed to wholly commercial farms in a particular developing country, the more difficult it is to predict on purely theoretical grounds the impact of policy changes on marketed surplus, and thus, the greater the need for econometric estimates of supply and consumption responses in farm households.

PD April 1991. **TI** Computable General Equilibrium Models: Retrospective and Prospective. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 596; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 9. **PR** $5.00. **JE** D58, B23. **KW** General Equilibrium Models.
AB One interesting issue is why it should have taken so long before the general equilibrium models originating with Johansen caught on in empirical policy analysis. After all, these models are more closely related to microeconomic theory than are input-output, linear programming, or macroeconometric models. There were both theoretical and empirical reasons for this lag. The theory of general equilibrium in the 1950s and 1960s was concerned with establishing the existence and uniqueness of equilibrium. It was not clear at the time that equilibrium was stable.

PD April 1991. **TI** Some Thoughts on Third-Generation, Economic-Demographic Models. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 605; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 10. **PR** $5.00. **JE** O11, J11, O21. **KW** Economic Development. Demographics. Planning Models.
AB I should like to take this occasion to enter a plea for greatly enlarging the scope of demographic models by transforming them from models of population accounting and population dynamics into full-fledged models of the human factor in economic and social development. The need for the dethroning of GNP as a criterion for economic and social planning is generally agreed upon by most social scientists. It is also generally accepted that what one must substitute for GNP, as both the end and the means for development, is human beings. This is a focus which is natural to demography. At the moment, neither the analytic framework nor the conceptual

apparatus required for this reorientation is clearly evident. It is in the development of such a framework that the third generation of demographic models could find both its challenges and its opportunities.

PD April 1991. **TI** Economic Development: Lessons from the Past and Challenges for the Future. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 604; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 6. **PR** $5.00. **JE** O14, O17, O11. **KW** Economic Development. Industrialization.
AB Purposive accelerated structural change, in the direction of industrialization, is possible. Such structural change entails not only changes in the structure of production, trade, employment, and productivity but also massive social change (in population growth, internal migration, education, family structure, and social mobility) and changes in economic and political institutions and in cultural values and life-styles. By historical standards, the pace of economic structural change and of social change has been unprecedentedly fast. In part (but only in part, as a result, there has been a lag in institutional adaptation - especially political adaptation - and there have been constraints on absorptive capacity for adapting to changes as well as gaps in the development of economic institutions and persistence of inappropriate economic institutions.

PD April 1991. **TI** Linking Social Indicators to the UN Models. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 603; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 61. **PR** $12.20. **JE** C67, F01. **KW** Social Indicators. Input-Output Model. Developing Countries.
AB The present report addresses the questions of how to incorporate social indicators into the UN models for developing countries. There are three possible reasons why one should be interested in linking social variables into the UN models. One is estimation of the status of a country's population or of particular segments thereof on dimensions of direct importance to individual welfare other than income. The second is projection of the likely impact of policy changes upon noneconomic aspects of welfare. The third is better projection of the economic variables endogenous to the UN models.

PD April 1991. **TI** The Case for Agrarian Reform Fund. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 601; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 26. **PR** $5.20. **JE** Q15, Q17, O13. **KW** Land Reform. Agriculture. Developing Countries.
AB Interest in land reform has waxed and waned. In the aftermath of World War II, the United States directed and implemented major land redistribution programs in Japan, South Korea, and Taiwan. During the 1960s, land reform became the principal policy instrument of the Alliance for Progress for Latin America and the major nonmilitary policy alternative in South Vietnam. During the 1970s, disillusionment over the pace and accomplishments of land reform in Latin America, the food crisis of the early 1970s, the hopes associated with the introduction of the high-yield grain varieties, and the energy and balance-of-payments crises all contributed to pushing land reform off the international policy agenda. There are signs, however, that interest in land reform as the primary nonmilitary mechanism for the political stabilization and democratization of noncommunist authoritarian regimes is reviving.

PD April 1991. **TI** Education, Economic Growth, and Income Distribution in a Developing Economy. **AU** Adelman, Irma; Amnon, Levy. **AA** Adelman: University of California, Berkeley. Amnon: Ben Gurion University. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 600; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 31. **PR** $6.20. **JE** O15, O57, O11. **KW** Income Distribution. Economic Development. Developing Countries. Education.
AB Social scientists long ago established that education is one of the most important ordering principles that govern the characteristics of individuals and their movement through modern, large-scale, complex social systems. Education is a major determinant of an individual's occupation and social status. In the last two decades, developing countries have, therefore, invested quite heavily in education. After a short summary of the empirical evidence on the relationship between education and economic development, the paper develops a theoretical framework for studying the effects of human and physical capital accumulation on income distribution in a growing economy.

PD April 1991. **TI** The Lack of Pareto Superiority of Unegalitarian Wealth Distributions. **AU** Adelman, Irma; Cheng, Leonard. **AA** Adelman: University of California, Berkeley. Cheng: University of Florida. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 598; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 32. **PR** $6.40. **JE** O15, O41. **KW** Wealth Distribution. Income Distribution. Growth Model.
AB In a recent paper, Bourguignon has shown that, when one or more unegalitarian wealth distributions exist within the "stability interval" of a stable egalitarian distribution, they are Pareto superior to the egalitarian one. This results, if applicable to a real economy, would have profound implications for social policy. In particular, it would imply that social policies aimed at achieving more egalitarian income and wealth distributions could end up making everyone worse off. However, since Bourguignon's result is obtained in a one-sector model and is not consistent with empirical evidence in some of the less-developed countries (for example, South Korea, Taiwan, and Singapore), one may question its validity in a more general framework. The purpose of this note is to demonstrate that Bourguignon's results do not generalize to a two-sector model of wealth distribution.

PD April 1991. **TI** Human Resource Intensive Strategies in Developing Economies. **AU** Adelman, Irma; Levy, Amnon. **AA** Adelman: University of California, Berkeley. Levy: Ben Gurion University. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 599; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 24. **PR** $5.00. **JE** O15, O41.

KW Economic Development. Income Distribution. Growth Model. Human Capital.
AB Empirical evidence concerning the relationship between education-intensive development strategies and income distribution is used to formulate a growth model in which the variance of the dispersion rate of income is linked to the human and physical capital intensity of production. It is shown that, under plausible assumptions, the growth trajectory does not have a unique steady state. Of the possible steady states, for any two steady states characterized by equal per capita output and by different combinations of physical capital-labor ratio and average human capital, the income distribution associated with the steady state with the higher level of average human capital is Lorenz superior.

PD April 1991. **TI** A Dynamic Model of Personal Wealth and Income Distribution in a Growing Closed Economy. **AU** Adelman, Irma; Cheng, Leonard. **AA** Adelman: University of California, Berkeley. Cheng: University of Florida. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 602; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 44. **PR** $8.80. **JE** O15, O41, O11. **KW** Income Distribution. Wealth Distribution. Economic Development. Growth Model. Savings.
AB A two-sector, two-class growth model is developed incorporating the following features: (a) the capital good is more capital intensive than the wage good, (b) the wage good is different from the consumption good of the capitalists, and (c) the saving/income ratio is a function of wealth holdings. In this model, we derive conditions under which a more egalitarian wealth distribution is associated with a more egalitarian income distribution. We demonstrate the difficulty of achieving a constant long-run wealth and income distribution by market forces alone. The savings behavior may be incompatible with such an objective and there may not exist any technological progress that would sustain a desirable wealth and income distribution. As a result, policy intervention in the form of direct wealth and income transfers may be necessary to attain a desirable wealth and income distribution in the long-run.

Aim, James

TI Fertility and the Personal Exemption: Implicit Pronatalist Policy in the United States. **AU** Whittington, Leslie A.; Aim, James; Peters, Elizabeth H.

Allen, Beth

PD March 1991. **TI** Why do Stores Double Coupons? **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 91-03; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 37. **PR** no charge. **JE** L81, L13. **KW** Oligopoly. Retail Trade. Grocery Stores. Coupons.
AB This paper focuses on one particular aspect of the strategic pricing decisions of oligopolistic retail stores. American grocery stores frequently advertise that they offer to double (and even triple) the value of manufacturers' coupons redeemed by purchases at the stores. This appears to be a strange policy as it involves a very labor-intensive and presumably inefficient way to implement a sale. Moreover, asymmetric equilibria are frequently observed in which some but not all stores double coupons. The theoretical issues behind such strategies by firms and consumers are examined using methods from noncooperative game theory and the economics of information. The goal here is to provide various sets of conditions under which double coupons can be explained as equilibrium behavior and stronger conditions under which stores strictly prefer this strategy over various alternative price deals.

Alogoskoufis, George S.

PD December 1990. **TI** On Budgetary Policies and Economic Growth. **AU** Alogoskoufis, George S.; van der Ploeg, Frederick. **AA** Alogoskoufis: Department of Economics, Birkbeck College, London. van der Ploeg: CentER, Tilburg University. **SR** CEPR Discussion Paper: 496; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 25. **PR** Pounds 3.00 or $5.00. **JE** 020, 111, 320. **KW** Budgetary Policy. Burden of Debt. Consumption. Endogenous Growth.
AB This paper investigates the implications of budgetary policies for consumption and economic growth. We present a model that combines the Arrow-Romer endogenous growth model with the Blanchard-Yaari overlapping-generations model. We show that a rise in government debt, financed by lump-sum taxes, increases the share of private consumption to national income and reduces the long-run growth rate. We also show that a rise in government consumption financed by lump-sum taxes reduces both the share of private consumption in national income and the long-run growth rate. These results do not follow in infinite-horizon, representative-household models of endogenous growth. In such models the substitution of debt for tax finance does not affect consumption and the growth rate, and a balanced budget increase in government consumption crowds out private consumption one-for-one, without any effects on the growth rate. The paper examines the dynamic adjustment of consumption, growth and government debt to a temporary tax cut, and briefly discusses the empirical implications of the results.

PD June 1991. **TI** Political Parties, Elections and Inflation in Greece. **AU** Alogoskoufis, George S.; Philippopoulos, Apostolis. **AA** Alogoskoufis: Department of Economics, Birkbeck College, London. Philippopoulos: Department of Economics, Essex University. **SR** CEPR Discussion Paper: 547; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 30. **PR** Pounds 3.00 or $5.00. **JE** 023, 025. **KW** Political Parties. Elections. Unemployment. Greece.
AB We extend the 'rational partisan model' of inflation and unemployment by introducing inflation and unemployment dynamics. We investigate the case of Greece, which has had a polarized political system and a problem of persistently high inflation in the last two decades. High inflation can be attributed to the failure of political parties to precommit to price stability. The greater aversion of 'socialists' to unemployment results in an inflation rate which is higher by five percentage points than under the more anti-inflationary 'conservatives'. Unemployment seems to be independent of the identity of the party in power, and post-election years do not seem to be characterized by systematic mistakes on the part of wage setters as predicted by recent partisan theories.

Altman, Edward I.

PD June 1991. **TI** Highly Leveraged Restructurings: A Valid Role of Europe. **AU** Altman, Edward I.; Smith, Roy C. **AA** Altman: New York University. Smith: New York University and Goldman, Sachs and Co. **SR** New York University Salomon Brothers Center Working Paper: S-91-26; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 18. **PR** $5.00. **JE** G34, G32, L33, L11. **KW** Mergers. Capital Structure. Buyouts. Privatization.

AB During the 1980's, a process of industrial and financial restructuring in Europe began, much of which was accomplished through privatizations, mergers and acquisitions involving large public companies, and a variety of transactions involving increasing amounts of leverage. There is still a great deal of additional restructuring to be accomplished in the future. Accompanying these developments has been Europe's first experimentation with leveraged buyouts. These transactions, however, did not evolve into the highly speculative, junk bond-financed transactions that occurred in the late 1980's in the U.S. This paper investigates the validity of highly leveraged transactions in the context of classical theories of corporate capital structure, and demonstrates how techniques of LBO financing in the U.S. have evolved in a theoretically valid manner, despite evidence of excesses.

Altug, Sumru

PD June 1991. **TI** Human Capital, Aggregate Shocks and Panel Data Estimation. **AU** Altug, Sumru; Miller, Robert A. **AA** Altug: University of Minnesota and Federal Reserve Bank of Minneapolis. Miller: Carnegie Mellon University and Economics Research Center/NORC. **SR** Economics Research Center/NORC Discussion Paper: 91-1; Economics Research Center/NORC, 1155 E. 60th St., Chicago, Illinois 60637. **PG** 64. **PR** $2.00; send requests to Librarian, NORC. **JE** J22, J21, J31. **KW** Wages. Employment. Female Labor Supply. Preferences. Labor Force Participation.

AB This paper analyzes how the wage and employment decisions of females are affected by past work force participation and hours supplied. Our estimation methods exploit the fact that, when markets are complete, the Lagrange multiplier for an agent's lifetime budget constraint always enters multiplicatively with the prices of (contingent claims to) consumption and leisure. Depending on the properties of the equilibrium price process, it is thus possible to predict the behavior of a wealthy agent by observing that of a poorer person living in a more prosperous world. This provides the key to estimating, nonparametrically, the expectations that enter the calculus of equilibrium decision-making, and ultimately the structural parameters which characterize preferences.

Amihud, Yakov

PD September 1990. **TI** Liquidity, Maturity and the Yields on U.S. Treasury Securities. **AU** Amihud, Yakov; Mendelson, Haim. **AA** Amihud: New York University and Tel Aviv University. Mendelson: Stanford University. **SR** New York University Salomon Brothers Center Working Paper: S-90-29; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 23. **PR** $5.00. **JE** G12, G14. **KW** Bonds. Asset Pricing. Stock Market.

AB The effects of asset liquidity on expected returns, shown by Amihud and Mendelson (1986, 1989) for assets with infinite maturities (stocks), are examined for bonds - Treasury notes and bills with matched maturities of less than 6 months. The yield to maturity is higher on notes, which have lower liquidity. The yield differential between notes and bills is a decreasing and convex function of the time to maturity. The results provide a robust confirmation of the liquidity effect in asset pricing.

Amnon, Levy

TI Education, Economic Growth, and Income Distribution in a Developing Economy. **AU** Adelman, Irma; Amnon, Levy.

Anderson, Simon P.

PD December 1990. **TI** The Logit as a Model of Product Differentiation: Further Results and Extensions. **AU** Anderson, Simon P.; de Palma, Andre. **AA** Anderson: University of Virginia. de Palma: Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 913; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 40. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** L13, D43. **KW** Oligopoly. Differentiated Products. Market Structure.

AB There is a growing interest in using the discrete choice approach to study oligopolistic competition under product differentiation, and a prominent discrete choice model is the multinomial logit. Here we analyze various aspects of the logit in this context. We first show that the predictions of the logit are very similar to those of the well-known CES model and explain why this is so. We next discuss the existence and uniqueness of a price equilibrium for a general version of the logit. We then illustrate (using the logit) the flexibility and tractability of the discrete choice approach for two different problems. The first of these finds a free-entry equilibrium with multiproduct firms. The second uses the logit to construct a simple search model. We also introduce the nested logit as an oligopoly model and apply it to these two problems.

Andrews, Donald W. K.

PD April 1991. **TI** Exactly Unbiased Estimation of First Order Autoregressive/Unit Root Models. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 975; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 45. **PR** no charge. **JE** C22, C13, C51. **KW** Autoregressive Process. Confidence Interval. Time Trend. Model Selection. Unit Roots.

AB This paper is concerned with the estimation of first-order autoregressive/unit root models with independent identically distributed normal errors. The models considered include those without an intercept, those with an intercept, and those with an intercept and time trend. The autoregressive (AR) parameter alpha is allowed to lie in the interval (-1,1], which includes the case of a unit root. Exactly median-unbiased estimators of the AR parameter alpha are proposed. Exact confidence intervals for this parameter are introduced. Corresponding exactly median-unbiased estimators and exact confidence intervals are also provided for the impulse response function and the cumulative impulse response. An unbiased model selection procedure is discussed. The procedures that are introduced are applied to several data series including real exchange rates, the

velocity of money, and industrial production.

Andrews, Stephen H.

TI The Classification of Manufacturing Industries: An Input-Based Clustering of Activity. **AU** Abbott, Thomas A.; Andrews, Stephen H.

Arrow, Kenneth J.

PD November 1990. **TI** Proposed Reforms of the Economic System of Information and Decision in the USSR: Commentary and Advice. **AU** Arrow, Kenneth J.; Phelps, Edmund S. **AA** Arrow: Stanford University. Phelps: Columbia University. **SR** Columbia Department of Economics Working Paper: 516; Department of Economics, Columbia University, New York, New York 10027. **PG** 29. **PR** $5.00. **JE** O17, P21, P27. **KW** Economic Reform. Soviet Union. Economic Development. Market Economy.

AB This chapter takes up the range of proposed reforms of the economy receiving attention in the Soviet Union. The chapter is divided into three sections: the first a commentary on the recent reform discussion (with brief summaries of the leading written plans), the second an attempt to project the broad direction that any adopted program is likely to take with some indication of its possible weaknesses, and the third our suggestions at those points where in our view the program of reform will need strengthening or additional thinking to increase the likelihood that it will come near to achieving its goals.

Bagnoli, Mark

PD June 1990. **TI** Price Discrimination and Intertemporal Self-Selection. **AU** Bagnoli, Mark; Salant, Stephen W.; Swierzbinski, Joseph E. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 91-1; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 31. **PR** not available. **JE** D42, D21, L15, L12. **KW** Durable Goods. Monopoly. Consumers. Product Quality.

AB We consider a monopolist selling durable goods to consumers with unit demands but different preferences for quality. The seller can offer items of different quality at the same time to induce buyers to self-select, as in Mussa-Rosen (1978), but is not artificially constrained to offer only one such menu. Instead the seller can offer a sequence of menus over time. In the two-buyer case, the seller finds it optimal to abandon multi-item menus with their quality distortions and instead induces self-selection intertemporally. In the unique subgame-perfect equilibrium of the finite-horizon game and the particular equilibrium that we consider in the infinite-horizon game, the monopolist offers in succession single items of efficient quality. In the continuous-time limit of the infinite-horizon game (under both complete and incomplete information), the monopolist approximates the present value of perfect price discrimination.

TI Courtship as a Waiting Game. **AU** Bergstrom, Ted; Bagnoli, Mark.

Bagwell, Kyle

PD February 1991. **TI** Pricing to Signal Product Line Quality. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 921; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 34. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** L15, D42, L12. **KW** Product Quality. Learning. Information. Prices. Monopoly.

AB Most firms offer a variety of products, that is, a product line. Further, these products seem to share a "quality" basis: while some firms offer high-quality products, others specialize in lower-quality goods. This basic dichotomy may reflect, for example, the decision to use a high-versus-low-quality input. For some input that is common to all products. Eventually, consumers acquire experience with the firm's products and properly assess the general quality of the product line. In particular, consumers will attempt to infer product line quality from the product line price schedule. This in turn implies that a firm with a high-quality product line must "distort" its prices so as to ensure that consumers correctly infer the quality of the product line. The presence of pricing distortions raises several issues: Are the prices of all products distorted? Are prices distorted up or down? For which products are prices distorted most? A convincing resolution to these questions would have both practical and predictive content. The purpose here is to provide an equilibrium analysis of these issues for the case of a monopolist whose product line quality is either high or low.

Bahk, Byong H.

TI Decomposing Technical Change. **AU** Gort, Michael; Bahk, Byong H.; Wall, Richard A.

Ball, Clifford A.

PD May 1986. **TI** Futures Options and the Volatility of Futures Prices. **AU** Ball, Clifford A.; Torous, Walter N. **AA** Ball: University of Michigan. Torous: University of Michigan and University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 10-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 25. **PR** $2.00; checks payable to U.C. Regents. **JE** G13, G14. **KW** Futures Pricing. Futures Markets. Option Pricing.

AB Assuming nonstochastic interest rates, European futures options are shown to be European options written on a particular asset referred to as a futures bond. Consequently, standard option pricing results may be invoked and standard option pricing techniques may be employed in the case of European futures options. Additional arbitrage restrictions on American futures options are derived. The efficiency of a number of futures options markets is examined. Assuming at-the-money American futures options are priced accurately by Black's European futures option pricing model, the relationship between market participants' ex ante assessment of futures price volatility and the term to maturity of the underlying futures contract is also investigated empirically.

PD June 1987. **TI** Investigating Security Price Performance in the Presence of Event Date Uncertainty. **AU** Ball, Clifford A.; Torous, Walter N. **AA** Ball: University of Michigan. Torous: University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 3-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA

90024-1481. **PG** 43. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G14, D81. **KW** Financial Markets. Securities. Asset Pricing. Uncertainty.

AB In an efficient financial market, security prices adjust instantaneously to reflect unanticipated information. Event studies focus on the impact of firm specific events upon the returns to the underlying firm's securities. Given a model generating equilibrium expected returns, the comparative performance of security returns around the time of the event is measured. Abnormal returns which persist after a particular event are inconsistent with market efficiency. Often the calendar date of an event is not known with certainty. The event date then becomes a random variable. The date the Wall Street Journal announces an event need not correspond to the date the event impacts security prices. The potential for even date misspecification arises whenever price data is reported more precisely than information regarding the event date. This paper introduces and implements an event study methodology which permits event date uncertainty.

Baron, David

PD September 1990. **TI** Dividing a Cake by Majority: The Simplest Equilibria. **AU** Baron, David; Kalai, Ehud. **AA** Baron: Stanford University. Kalai: Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 919; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 16. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** C73. **KW** Stochastic Game.

AB In a stochastic game of dividing a cake by majority, the simplest equilibria are the Baron-Ferejohn (1989) ones. The formal definition of simplicity and the computational methods of the equilibria make use of an automaton measure of complexity adopted for stochastic games.

Barr, Graham

TI Determinants of Corporate Ownership and Control in South Africa. **AU** Gerson, Jos; Barr, Graham.

Barro, Robert J.

PD April 1991. **TI** Convergence across States and Regions. **AU** Barro, Robert J.; Sala-i-Martin, Xavier. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 629; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven, CT 06520. **PG** 72. **PR** $2.00 + postage. **JE** R11, J61, D31, E25. **KW** Regional Economics. Economic Growth.

AB In this paper we examine the growth and dispersion of personal income in U.S. states and regions since 1880 and relate the patterns for individual states to the behavior of regions. Then we analyze the interplay between net migration and economic growth. We study the evolution of gross state product since 1963 and relate the behavior of aggregate product to productivity in eight major sectors. The overall evidence weighs heavily in favor of convergence: poor states tend to grow faster in terms of per capita income and product and within sectors as well as for state aggregates. The rate of convergence is, however, not rapid: the gap between the typical poor and rich state diminishes at roughly 2% per year. We apply the same framework to patterns of convergence across 73 regions of seven European countries since 1950. The process of convergence within European countries is similar to that for the United States. In particular, the rate of convergence is again about 2% per year.

Bartlesman, Eric J.

PD February 1991. **TI** Sourcing Externalities. **AU** Bartlesman, Eric J.; Caballero, Ricardo J.; Lyons, Richard K. **AA** Bartlesman: Federal Reserve Board. Caballero: Columbia University. Lyons: Columbia University and National Bureau of Economic Research. **SR** Columbia Department of Economics Working Paper: 525; Department of Economics, Columbia University, New York, New York 10027. **PG** 26. **PR** $5.00. **JE** L60, L14, D24, D62. **KW** External Economies. Manufacturing. Factor Productivity. Externalities. Transaction Costs.

AB In this paper we build upon previous work on external economies in manufacturing [Caballero and Lyons (1989, 1990)] by providing new evidence helpful for discriminating between different types of externalities. We investigate four-digit level input-output relationships and find that, over shorter horizons, the linkage between an industry and its customers is the most important factor in the transmission of externalities. Thus, as intuition would suggest, transactions externalities that accrue primarily to the seller and activity-driven demand externalities are significant for explaining the short-run behavior of measured total factor productivity. Over longer horizons, on the other hand, it is the activity level of suppliers that is more important, suggesting that external effects are also operating through intermediate goods linkages.

Bates, Timothy

PD August 1990. **TI** Self-Employment Trends among Mexican Americans. **AA** University of Vermont. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 90-9; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 24. **PR** no charge. **JE** J15, L11, L21. **KW** Small Businesses. Minorities. Market Structure.

AB Most minority-owned firms have traditionally been started with minimal financial capital inputs by owners who have not attended college. The resultant small scale firms have frequently oriented their operations toward serving a low income minority clientele. In this study, I investigate two closely interrelated broad hypotheses on minority business dynamics, utilizing a sample of Mexican American business establishments drawn from the Characteristics of Business Owners data base: 1. Traditional firms - these firms tend to (a) be small scale, (b) have high failure rates, (c) and generate few jobs because of their minimal owner inputs of financial and human capital. 2. Emerging firms, in contrast, are most commonly started by better educated owners--many of whom have attended four or more years of college--and financial capital inputs are high relative to those observed in traditional lines of business.

Beltratti, Andrea E.

PD February 1991. **TI** Actual and Warranted Relations between Asset Prices. **AU** Beltratti, Andrea E.; Shiller, Robert J. **AA** Beltratti: University of Turino. Shiller: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 970; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 25. **PR** $2.00. **JE** G12, G14, G15. **KW** Volatility. Stock Market. Asset Pricing. Efficient Markets. Information.

AB Efficient markets models assert that the price of each asset is equal to the optimal forecast of its ex-post or fundamental value. These models do not imply, however, that the covariance between two asset prices is given by the covariance between the ex-post values they respectively forecast: these two covariances can even have opposite signs. However, it is possible to place bounds on the covariance between asset prices given the covariance matrix of ex-post values. We present such bounds for both covariances and correlations and show how such bounds can be tightened using information beyond the covariance matrix of ex-post values. The methods are used to examine whether the historical correlation between the U.S. and U.K. stock markets 1919-1989 is warranted. The bounds on the warranted covariance are very wide and include the actual correlation.

Ben Porath, Elchanan

PD July 1991. **TI** Linear Measures, the Gini Index and the Income-Equality Tradeoff. **AU** Ben Porath, Elchanan; Gilboa, Itzhak. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 944; Northwestern University, 2001 Sheridan Road, Evanston, IL 60208-2014. **PG** 39. **PR** $3.00 in the U.S. or Canada; $5.00 via international mail. **JE** C43, D31, D78. **KW** Income Distribution. Index Numbers.

AB The paper provides an axiomatization of linear inequality measures as a representation of a binary relation on the subspace of income profiles having the same total income. Interpreting the binary relation as a preference (of, say, a policy-maker), we extend the axioms to the whole space of income profiles, and find that they characterize linear social evaluation functions. The axiomatization seems to suggest that a policy-maker who has a linear measure of inequality on a subspace should have a linear evaluation on the whole space. In particular, we find that an extension of the preferences reflected in the Gini index to the whole space is represented by a linear combination of total income and the Gini index.

Benhabib, Jess

PD April 1991. **TI** The Aggregate Effects of Monetary Externalities. **AU** Benhabib, Jess; Farmer, Roger E. A. **AA** Benhabib: New York University. Farmer: University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 617; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 33. **PR** $2.50; checks payable to U.C. Regents. **JE** D62, D51, E44. **KW** Monetary Economy. Exchange Economy. Rational Expectations.

AB We construct a theoretical model of a monetary economy in which money is used to facilitate exchange. Our model differs from existing approaches by allowing an important role for an externality in transacting. We calibrate the model and argue that the calibrated model has rational expectations equilibria in which beliefs may influence allocations independently of fundamentals. One of these equilibria provides a way of understanding the covariance of prices and money in small vector autoregressions.

Berardi, Stephen J.

TI The Determinants of Pesticide Regulation: A Statistical Analysis of EPA Decision-Making. **AU** Cropper, Maureen L.; Evans, William N.; Berardi, Stephen J.; Ducla-Soares, Maria M.; Portney, Paul R.

TI The Determinants of Pesticide Regulation: A Statistical Analysis of EPA Decision-Making. **AU** Cropper, Maureen L.; Evans, William N.; Berardi, Stephen J.; Ducla-Soares, Maria M.; Portney, Paul R.

Berck, Peter

TI Using SAM's to Account for Distortions in Non-Market Economies. **AU** Adelman, Irma; Berck, Peter; Vujovic, Dusan.

TI Financial Considerations of Public Inventory Holdings in Developing Countries. **AU** Adelman, Irma; Berck, Peter.

TI Designing Gradual Transition to Market Economies. **AU** Adelman, Irma; Berck, Peter; Vujovic, Dusan.

Berger, Allen N.

PD December 1990. **TI** Measurement and Efficiency Issues in Commercial Banking. **AU** Berger, Allen N.; Humphrey, David B. **AA** Berger: Board of Governors of the Federal Reserve System. Humphrey: Federal Reserve Bank of Richmond. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 151; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 33. **PR** no charge. **JE** G21, G28. **KW** Regulation. Commercial Banks. Banking.

AB This paper focuses on measuring bank output, explaining cost dispersion, and estimating net technical change. Bank output is determined using a value added approach, which identifies major deposit and loan categories as important outputs. Banks exhibit substantial cost dispersion which appears to represent operational inefficiencies, rather than differences in scale, product mix or input prices. This dispersion increased over 1980-88, suggesting an incomplete adjustment to the deregulation of the early 1980's. Changes in real operating costs per dollar of assets suggests little net technical progress over 1980-88, possibly a further reflection of disequilibrium, although depositors benefited from the deregulation.

Bergstrom, Ted

PD November 1989. **TI** The Effects of Cohort Size on Marriage Markets in Twentieth Century Sweden. **AU** Bergstrom, Ted; Lam, David. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 91-6; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 18. **PR** not available. **JE** J12, J11, J13. **KW** Marriage. Families. Demographics. Fertility.

AB Large, short-run fluctuations in the birth rate have been an important demographic feature of industrialized, low-fertility fluctuations result in large imbalances between the size of male and female cohorts who would normally marry each other. These imbalances must somehow be resolved, either by a change in traditional patterns of age at marriage or by changes in the proportions of the population of one sex or the other who ever marry.

PD April 1991. **TI** Peak-Load Pricing-With and Without Constrained Rate of Return. **AU** Bergstrom, Ted; MacKie-Mason, Jeffrey K. **AA** Bergstrom: University of Michigan.

MacKie-Mason: University of Michigan and National Bureau of Economic Research. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 91-4; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 26. **PR** not available. **JE** D42, L32. **KW** Public Utility. Prices. Monopoly.

AB We consider a public utility that offers its service at two different times. Capacity in place can be used in both periods. We study the effects of a change from uniform pricing throughout the day to peak-load pricing, when the utility is constrained to operate with a fixed rate of return on capital. We show that there are plausible circumstances in which the introduction of peak-load pricing reduces the price of the service both in peak and off-peak times. We show further that peak-load pricing can lead either to greater or to smaller capacity than uniform pricing. We are able to find simple expressions that determine the size and direction of each of these effects. We also provide a straightforward criterion for determining whether a particular individual gains or loses from peak-load pricing. Some of the results are extended under different assumptions about preferences, technology and market structure.

PD April 1991. **TI** Courtship as a Waiting Game. **AU** Bergstrom, Ted; Bagnoli, Mark. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 91-3; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 15. **PR** not available. **JE** J12, J11. **KW** Marriage. Family. Demographics.

AB In most times and places, women on average marry men who are older than themselves. We propose a partial explanation for this difference and for why it is diminishing. In a society where the economic roles of males are more varied and specialized than the roles of females, it may be that the relative desirability of females as marriage partners becomes evident at an earlier age for females than it does for males. We study an equilibrium model in which the males who regard their prospects as unusually good choose to wait until their economic success is revealed before choosing a bride. In equilibrium, the most desirable young females choose successful older males. Young males who do not believe that time will not treat them kindly will offer to marry at a young age. Although they are aware that young males available for marriage are no bargain, the less desirable young females will be offered no better option than the lottery presented by marrying a young male. We show the existence of equilibrium for models of this type and explore the properties of equilibrium.

Berlin, Mitchell

PD September 1990. **TI** Debt Covenants and Renegotiation. **AU** Berlin, Mitchell; Mester, Loretta J. **AA** Berlin: New York University. Mester: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-21; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 54. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** G32, L14. **KW** Debt. Contracts. Corporate Debt.

AB This paper analyzes the optimal restrictiveness of covenants for debt contracts both when contract renegotiation is possible and when it is not. Although restrictive covenants control agency problems, they reduce the borrowing firm's flexibility to pursue profitable opportunities. When contracts can be renegotiated covenants will be more severe, because they can be relaxed selectively when the borrower can convince the lender that they pose an inefficient constraint. We also analyze how the value of the option to renegotiate changes as the firm's ex ante creditworthiness varies and find that firms with high credit risk will find having the option to renegotiate most valuable. The model is used to explain why bank loans and privately placed debt will typically have more stringent covenants than public debt, and to predict the types of firms that will borrow using closely held debt.

Bertocchi, Graziella

PD January 1991. **TI** A Theory of Public Debt Management with Unobservable Demand. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 91-6; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 27. **PR** not available. **JE** H63, E62, H61. **KW** Public Debt. Government Bonds. Public Finance. Debt Management.

AB We study a model of public debt management where government bonds are the only investment opportunity and the demand for bonds is not directly observed by the authority. In this setup, the debt manager selects an optimal pricing policy, given an objective function which consists of profit maximization and is subject to an intertemporal government's budget constraint. We show how, under demand uncertainty, the rations produced by the discrepancies between estimated and actual demand reveal valuable information about the unobservable characteristics of investors: a trade-off therefore arises between current profits and the value of information. By applying results from the theory of "active learning," we show how the price adjustment process reaches a steady state. However, even if the debt manager uses the information content of the rations optimally, it is not ensured that he will eventually learn the true parameters of the demand function and charge the full-information price. In the long-run rations persist, but their average will be zero and they will lose their information value.

Betancourt, Roger R.

PD February 1991. **TI** The Outputs of Retail Activities: French Evidence. **AU** Betancourt, Roger R.; Gautschi, David A. **AA** Betancourt: University of Maryland, College Park. Gautschi: Yale University. **SR** University of Maryland Department of Economics Working Paper Series: 91-5; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 28. **PR** no charge. **JE** L81. **KW** Retail Trade. Profit Margin. Distribution Services.

AB In this paper we apply a new economic framework for the empirical analysis of retail margins to French survey data, INSEE 1912 (E.88), 1983 (E.97). This framework departs from the definition of profits and incorporates recent theoretical developments formalizing the economic role of distribution services as outputs of retail activities. Since the theory implies a nonlinear functional form, nonlinear least squares is the main estimation method. Our main findings are that treating distribution services as outputs of retail margins, suggests a number of feasible empirical constructs as measures of the outputs, and generates empirical results which support viewing distribution services as critical determinants of retail margins. In addition, the data reject the hypotheses of quantity setting

and price setting behavior under the assumption of a monopolistically competitive market structure.

Binmore, Ken

PD 1990. **TI** Evolutionary Stability in Repeated Games Played by Finite Automata. **AU** Binmore, Ken; Samuelson, Larry. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 90-17; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 25. **PR** not available. **JE** C71. **KW** Repeated Games. Cooperative Games. Prisoners' Dilemma. Folk Theorem.

AB Although the results in this paper are sufficiently simple to be applicable in general, attention will be focused on the Prisoners' Dilemma. Abreau and Rubinstein consider a situation in which "metaplayers" each choose a finite automaton to play the infinitely repeated Prisoners' Dilemma on their behalf. The metaplayers seek to maximize their profit; but if two automata achieve the same profit, a meta-player is assumed to prefer whichever is less complex.

PD November 1990. **TI** Foundations of Game Theory. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 90-16; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 25. **PR** not available. **JE** C70, B21. **KW** Game Theory. Microeconomics.

AB A properly founded game theory would have answers to questions like: What is the self? What do we have in common with others? What does it mean to know something? How do we learn? How should we learn? Right now we do not even know to what extent such questions are meaningful. But genuine progress is unlikely if we continue to regard the problem of scientific induction or the problem of personal identity as difficulties best left to philosophers. Game theorists cannot afford to take the same attitude to such questions as cyclists do to keeping their balance. Cyclists do not need to ask how they sustain their equilibria because they seldom find themselves upended in the ditch at the side of the road. But game theorists are not so fortunate. For game theory to become a reliable tool, we have to explore the fundamental issues until we know at least what we do not need to know. We can then perhaps agree on methods for evading the issues that are not central to our concerns.

Bizer, David S.

PD May 1991. **TI** Asymmetric Adjustment Costs, Capital Longevity, and Investment. **AU** Bizer, David S.; Sichel, Daniel E. **AA** Bizer: University of Chicago. Sichel: Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Economic Activity Section Working Paper Series: 119; Board of Governors of the Federal Reserve System, Economic Activity Section, Stop #80, Federal Reserve Board, Washington, D.C. 20551. **PG** 28. **PR** no charge. **JE** E22, L60. **KW** Investment. Adjustment Costs. Capital Stock. Manufacturing.

AB This paper estimates investment Euler equations derived from a model with asymmetries in costs of adjusting the capital stock. The model is robust in that it neither requires estimation of the marginal productivity of capital nor assumes the extent of competition in the output market. Using quarterly two-digit SIC data for manufacturing industries, estimated downward adjustment costs exceed upward adjustment costs in nine of the eleven industries examined. The difference is significant at the 10 percent level in five of these industries: paper, textiles, primary metals, electrical machinery, and non-electrical machinery.

Blackburn, McKinley L.

PD January 1991. **TI** The Distribution of Family Income: Measuring and Explaining Changes in the 1980s for Canada and the United States. **AU** Blackburn, McKinley L.; Bloom, David E. **AA** Blackburn: University of South Carolina. Bloom: Columbia University. **SR** Columbia Department of Economics Working Paper: 515; Department of Economics, Columbia University, New York, New York 10027. **PG** 30. **PR** $5.00. **JE** E25, D31, I38, J31. **KW** Income Distribution. Welfare Programs. Wage Differentials.

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

Blackorby, Charles

PD July 1991. **TI** Adult Equivalence Scales and the Economic Implementation of Interpersonal Comparisons of Well-Being. **AU** Blackorby, Charles; Donaldson, David. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-08; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** not available. **PR** not available. **JE** D11, D12. **KW** Consumer Economics. Preferences. Households.

AB After presenting the theory of adult-equivalence scales, we present a simple condition on preferences that is necessary and sufficient for adult-equivalence scales to be independent of the utility level of the household members Equivalence-Scale Exactness. ESE is completely characterized by a restriction on both preferences and interhousehold comparisons that we call Income-Ratio Comparability (IRC). It requires that, if there exist incomes such that the members of two households facing the same prices are equally well-off, then any scaling of household incomes preserves equality of well-being. If ESE/IRC is a maintained hypothesis and preferences are globally regular and nonhomothetic the equivalence scales can be estimated from behavior alone. Alternatively, if preferences are only locally regular, ESE/IRC allows the scales to be estimated from behavior as long as preferences are not piglog. These results are applied to families of translog and almost-ideal indirect utility functions.

Bliss, Robert R.

TI The Information in Long-Maturity Forward Rates. **AU** Fama, Eugene F.; Bliss, Robert R.

Bloom, David E.

PD January 1991. **TI** Benefits and Costs of HIV Testing.

AU Bloom, David E.; Glied, Sherry. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 517; Department of Economics, Columbia University, New York, New York 10027. **PG** 25. **PR** $5.00. **JE** I18, I12. **KW** Public Health. Health Care. Public Policy. Epidemic.

AB This article examines the benefits and costs of HIV testing in employment settings. The examination is conducted from two points of view: (1) that of private employers whose profitability may be affected by their testing policies, and (2) that of public policy-makers who may affect social welfare through their design of regulations related to HIV testing. Our empirical results reveal that HIV testing is clearly not cost-beneficial for most firms, although large firms that offer generous fringe benefit packages and that are located in regions in which the prevalence of HIV infection is high may find the benefits of HIV testing to marginally outweigh the costs.

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

PD January 1991. **TI** The Earnings of Linguistic Minorities: French in Canada and Spanish in the United States. **AU** Bloom, David E.; Grenier, Gilles. **AA** Bloom: Columbia University. Grenier: University of Ottawa. **SR** Columbia Department of Economics Working Paper: 514; Department of Economics, Columbia University, New York, New York 10027. **PG** 37. **PR** $5.00. **JE** J15, J31. **KW** Minorities. Wages. Wage Differentials.

AB This paper measures and compares the relative earnings of French and English speakers in Canada, and of Spanish and English speakers in the U.S., in the 1970's and 1980's. In Canada, the earnings gap between French and English speakers narrowed over time, especially in Quebec. This decline appears to have been caused primarily by a sharp increase in the relative demand for French-speaking workers within Quebec during the 1970's and 1980's. By 1986, nearly all of the remaining earnings gap could be accounted for by differences in annual hours worked, marital status, age, education, and region. By contrast, the earnings gap between Spanish and English speakers in the United States remained high during the 1970's and 1980's and is not largely accounted for by differences in a standard set of control variables.

Bonnanno, Giacomo

PD May 1991. **TI** Rational Beliefs in Extensive Games. **AA** University of California at Davis. **SR** University of California at Davis Economics Department Working Paper: 383; Department of Economics, University of California at Davis, Davis, California 95616-8578. **PG** 29. **PR** not available. **JE** C72. **KW** Extensive Games. Information. Beliefs. Perfect Equilibrium. Sequential Equilibrium.

AB Given an extensive game, with every node x and every player i a subset K(x) of i of the set of terminal nodes is associated, and is given the interpretation of player i's knowledge (or information) at node x. A belief of player i is a function that associates with every node x an element of the set K(x) of i. A belief system is an n-tuple of beliefs, one for each player. A belief system is rational if it satisfies four natural consistency properties. The main result of the paper is that the notion of rational belief system gives rise to a refinement of the notion of subgame-perfect equilibrium.

Boschen, John F.

PD June 1990. **TI** The Role of Monetary and Real Shocks in Near-Permanent Movements in GNP. **AU** Boschen, John F.; Mills, Leonard O. **AA** Boschen: College of William and Mary. Mills: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-20; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 39. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** E23, E52, E32. **KW** GNP. Monetary Policy. Macroeconomics. Business Fluctuations.

AB In this paper we present tests of two hypotheses concerning the source of near permanent movements in the log of real GNP. The traditional monetary hypothesis explains persistence in GNP as the result of nominal rigidities in the economy in combination with a particular monetary policy behavior. The real hypothesis links persistence in GNP to real factors. Using recently developed tests for examining systems with common trends, we reject the view that nominal rigidities play a role in explaining this facet of macroeconomic behavior. We find more support for the real hypothesis in that a group of factors associated with population, productivity, and resource constraints, combine to account for the near-permanent movements in GNP.

Bossert, Walter M.

PD February 1991. **TI** Monotonic and Homogeneous Solutions for Bargaining Problems with Claim. **AA** University of British Columbia and Universitat Karlsruhe. **SR** University of British Columbia Department of Economics Discussion Paper: 91-07; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 22. **PR** not available. **JE** C78. **KW** Bargaining Theory. Bargaining.

AB The paper discusses two further aspects of axiomatic bargaining models with claims. First, solutions for bargaining problems with claims are analyzed with respect to their monotonicity properties concerning changes in the disagreement point and the claims point. In particular, it is shown that the proportional, the claim-egalitarian, and the extended claim-egalitarian solutions satisfy the following disagreement point and claims point monotonicity conditions. If an agent's disagreement point (claims point) component increases, this agent is not worse off than before and she or he is the only one who can gain from such a ceteris paribus improvement in his or her bargaining position. Second, a characterization of the proportional solution that is based on a homogeneity property is provided.

PD March 1991. **TI** Continuous Choice Functions and the Strong Axiom of Revealed Preference. **AA** University of British Columbia and Universitat Karlsruhe. **SR** University of British Columbia Department of Economics Discussion Paper: 91-09; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 12. **PR** not available. **JE** D11, D12. **KW** Revealed Preferences. Consumer Economics. Utility Theory.

AB In this note, it is shown that a result due to Uzawa showing that the weak axiom of revealed preference together with a regularity condition implies the strong axiom of revealed preference can be derived from the regularity condition alone,

if the choice function is continuous in prices and in income. The observation that the weak axiom of revealed preference is not needed suggests that this regularity condition is remarkably strong. The main result of the paper is quite general in the sense that the only additional assumption on the choice function is that the whole budget be spent.

PD April 1991. **TI** Distance Measures for Preference Orderings and Strategy-Proofness of Social Welfare Functions. **AU** Bossert, Walter M.; Storcken, Ton. **AA** Bossert: University of British Columbia and Universitat Karlsruhe. Storcken: Tilburg University. **SR** University of British Columbia Department of Economics Discussion Paper: 91-11; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 26. **PR** not available. **JE** D11, D12, D71. **KW** Social Welfare Functions. Preferences. Social Choice. Impossibility Theorem. Consumer Economics.
AB A distance function for preference orderings is used to determine individual rankings of social preferences. Based on this distance function, the strategy-proofness of social welfare functions is examined. Our main result is an impossibility theorem stating that no social welfare function can be strategy-proof, if some additional rather mild properties are required.

PD August 1991. **TI** Generalized Median Social Welfare Functions. **AU** Bossert, Walter M.; Weymark, John A. **AA** Bossert: University of Waterloo. Weymark: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-29; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 31. **PR** not available. **JE** D71, H41. **KW** Social Welfare Functions. Social Choice. Public Goods.
AB This article considers the construction of social welfare functions when the set of alternatives is the two-dimensional nonnegative orthant, as would be the case if there are two divisible public goods which can be consumed in any nonnegative quantities. With individual and social preferences required to be linear and strictly monotonic, but otherwise unrestricted, we characterize all of the social welfare functions which satisfy binary independence of irrelevant alternatives and anonymity and which satisfy binary independence of irrelevant alternatives, anonymity, and weak Pareto. These classes of social welfare functions are shown to be formally equivalent to the classes of social choice functions characterized by Moulin in his study of strategy-proof social choice with single-peaked preferences.

Brainard, Lawrence J.

PD 1991. **TI** Reforem in Eastern Europe: Creating a Capital Market. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: S-91-11; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 28. **PR** $5.00. **JE** O16, P52, O52. **KW** Financial Markets. Economic Reform.
AB What role should the reform of financial markets play in the economic transformation of Eastern European countries into market economic systems? Two perspectives are essential in addressing this question: (1) What is the fundamental goal of the transformation process and how does financial market reform contribute to achieving that goal? (2) Where are we today in the reform process and what near term changes in financial markets are necessary in order to move toward that goal?.

Brennan, Michael J.

PD November 1986. **TI** Efficient Financing under Asymmetric Information. **AU** Brennan, Michael J.; Kraus, Alan. **AA** Brennan: University of California, Los Angeles. Kraus: University of British Columbia. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 25-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 37. **PR** $2.00; checks payable to U.C. Regents. **JE** G31, G32. **KW** Corporate Finance. Investment. Business Finance.
AB It has been demonstrated by Myers and Majluf (1984) that, to the extent that firms are unable to communicate their future prospects credibility to investors, the resulting adverse selection problem may cause significant social welfare losses, by inducing firms to forgo investment opportunities which would otherwise be profitable. In this paper we explore the possibility that, despite the information asymmetry, the investment opportunities may yet be efficiently financed by an appropriate choice of financing instruments which will reveal the private information of corporate insiders to investors.

PD December 1986. **TI** Optimal Arbitrage Strategies under Basis Variability. **AU** Brennan, Michael J.; Schwartz, Eduardo S. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 21-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 23. **PR** $2.00; checks payable to U.C. Regents. **JE** G11, G12. **KW** Stock Market. Portfolio Choice. Arbitrage. Asset Prices.
AB Recent evidence on the market for stock index and other financial futures reveals that these contracts do not always trade at the prices predicted by a simple arbitrage relation with the spot price. For example, Figlewski (1985) reports that the annualized standard deviation of daily returns on a portfolio corresponding to the New York Stock Exchange Index, hedged by a short position in the nearest NYSE futures contract, was 19.72% for the period January 1981 to March 1982; the corresponding figure for the S&P 500 portfolio for the same period was 16.46%. Casual empiricism suggests that this variability in the basis has persisted. Explanations proposed for the variability in the basis include the mark-to-market requirement for futures contracts, the differential tax treatment of spot and futures, and the existence of a tax timing option in a spot but not in a futures position, as well as the difficulties of arbitrage between a large portfolio of 500 stocks and a futures contract.

PD April 1987. **TI** A Model of Stock Split Behavior: Theory and Evidence. **AU** Brennan, Michael J.; Copeland, Thomas E. **AA** University of California at Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 8-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 18. **PR** $2.00; checks payable to U.C. Regents. **JE** G32, G34. **KW** Common Stock. Securities. Stock Market.

AB It is a common occurrence for firms to subdivide or split their outstanding shares of common stock; less often, outstanding shares are consolidated in a "reverse" stock split. Similar subdivision or consolidation of existing securities is not generally observed for other security types, and it is widely believed that stock splits and reverse stock splits are purely cosmetic, since the cash flows of the corporation are unaffected, since each shareholder retains his proportionate ownership, and since the claims of the other classes of security holders remain unaltered by the subdivision.

PD June 1987. **TI** Vendor Financing. **AU** Brennan, Michael J.; Maksimovic, Vojislay; Zechner, Josef. **AA** Brennan: University of California, Los Angeles. Maksimovic and Zechner: University of British Columbia. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 11-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 24. **PR** $2.00; checks payable to U.C. Regents. **JE** G21. **KW** Commercial Banks. Banking. Credit. Private Debt.
AB This paper shows that even in the presence of a perfectly competitive banking industry, it is optimal for firms to engage in vendor financing if credit customers have lower reservation prices than cash customers, or if adverse selection makes it infeasible to write credit contracts which separate customers according to their riskiness. We analyze how the advantage of vendor financing depends on the sizes of the cash and credit markets, the heterogeneity of credit customers, and the number of firms in the industry.

PD July 1987. **TI** Arbitrage in Stock Index Futures. **AU** Brennan, Michael J.; Schwartz, Eduardo S. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 9-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 26. **PR** $2.00; checks payable to U.C. Regents. **JE** G13, G12, G11. **KW** Stock Market. Securities. Futures Market. Transaction Costs.
AB The textbook description of arbitrage suggests that it is a straightforward matter of taking offsetting positions in different securities and realizing the arbitrage profit. Such descriptions, however, typically ignore the transaction costs which give rise to the arbitrage opportunity in the first place. Taking proper account of these transactions costs may considerably complicate the problem, particularly when, as is usually the case, the arbitrage potential is restricted. This paper is concerned with optimal arbitrage strategies with transaction costs when the arbitrage potential is restricted by position limits.

PD September 1987. **TI** Time Invariant Portfolio Insurance Strategies. **AU** Brennan, Michael J.; Schwartz, Eduardo S. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 2-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 35. **PR** $2.00; checks payable to U.C. Regents. **JE** G11, G22. **KW** Portfolio Choice. Insurance.
AB This paper characterizes the complete class of time invariant portfolio insurance strategies and derives the corresponding value functions which relate the wealth accumulated under the strategy to the value of the underlying insured portfolio. Time invariant strategies are shown to correspond to the long-run policies for a broad class of portfolio insurance payoff functions.

PD November 1987. **TI** Portfolio Insurance and Market Volatility. **AU** Brennan, Michael J.; Schwartz, Eduardo S. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 15-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 31. **PR** $2.00; checks payable to U.C. Regents. **JE** G11, G12. **KW** Portfolio Choice. Insurance. Stock Market. Asset Prices.
AB The explosive growth in the popularity of portfolio insurance investment programs that has taken place over the last few years and the events of October 1987 have created concern that the simultaneous use of such strategies by a large number of market participants may have the effect of substantially increasing the volatility of stock market prices, with adverse consequences for both the stability of the financial system and the cost of funds raised by private sector corporations.

Broadberry, Stephen

PD May 1991. **TI** Why was Unemployment in Postwar Britain So Low. **AA** Broadberry: Department of Economics, University of Warwick. **SR** CEPR Discussion Paper: 541; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 35. **PR** Pounds 3.00 or $5.00. **JE** 044, 122, 820. **KW** Unemployment. Real Wage. Postwar Settlement.
AB This paper takes a fresh look at the low unemployment in postwar Britain, which is seen as exceptional rather than the norm. During the 1950s and 1960s low unemployment was reconciled with stable inflation through the exercise of wage restraint. Yet the postwar settlement which underpinned this wage restraint also allowed the entrenchment of restrictive practices, which inevitably slowed the growth of productivity and the feasible real wage, thus contributing to Britain's relative economic decline.

Bruhn, Christine G.

TI Food Safety: Consumer Concerns and Consumer Behavior. **AU** Lane, Sylvia; Bruhn, Christine G.

Bruneau, C.

PD November 1990. **TI** Behaviors, Beliefs and Causal Laws: The Example of the Crude Oil Future Market. **AU** Bruneau, C.; Nicolai, J. P. **AA** Bruneau: ENSAE. Nicolai: Caisse des Depots et Consignations. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9015; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 34. **PR** no charge. **JE** L71, G13, L22. **KW** Oil. Futures Market. Petroleum.
AB We study the role of a futures market in the emergence of a causal relation between the crude and product oil markets. The agents' representations (Producer-Refiner) are differentiated but they all ignore this causality which however is revealed by an external observer using the equilibrium prices. Causality in FEIGL's sense ("predictability according to a law") appears to depend on the position of the one realizing the causal analysis.

Buckman, A. G.

TI Cost Allocation and Opportunity Costs. **AU** Miller, Bruce L.; Buckman, A. G.

Buiter, Willem H.

PD July 1991. **TI** Persistent Differences in National Productivity Growth Rates with a Common Technology and Free Capital Mobility. **AU** Buiter, Willem H.; Kletzer, Kenneth M. **AA** Buiter: Department of Economics, Yale University. Kletzer: Department of Economics, Yale University. **SR** CEPR Discussion Paper: 542; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 57. **PR** Pounds 3.00 or $5.00. **JE** 111, 320, 430. **KW** Endogenous Growth. Convergence. Productivity. Non-Traded Goods. Externalities.

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

Burgess, Simon M.

PD July 1991. **TI** Nonlinear Dynamics in a Structural Model of Employment. **AA** University of Bristol and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 37; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 40. **PR** no charge. **JE** J23, E24, E32. **KW** Search Model. Adjustment Costs. Employment.

AB Search and matching models imply that firm's employment adjustment costs depend on the tightness of the labor market, giving rise to endogenous or nonlinear dynamics in employment. This paper sets this argument out in detail, estimating a model simultaneously explaining the long-run level of employment and the nonlinear dynamics. The main implications of the estimated model are (i) the effect of a given shock to the long-run level of employment is markedly different at different levels of employment, and (ii) asymmetric business cycles result with the downswing in employment being sharper and deeper than the upswing.

Burkett, John P.

PD January 1991. **TI** The Supply of Labor by Individuals to a Chinese Collective Farm: The Case of Dahe Commune. **AU** Burkett, John P.; Putterman, Louis. **AA** Burkett: University of Rhode Island. Putterman: Brown University. **SR** Brown University Department of Economics Working Paper: 91-1; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 23. **PR** not available. **JE** 053, P32, Q13. **KW** China. Collective Farm. Agriculture. Collectives. Communes.

AB We provide the first econometric tests of the theory of individual labor supply in a collective farm on data at the individual level. The data are for members of five production teams in a commune in Hebei province in 1979. Our switching regressions model does not provide evidence of a significant labor supply response to differences in anticipated earnings. We argue, however, that this failure may be indirect evidence of "underdifferentiation" of payments, due to egalitarian ideology. More importantly, we provide the first econometric evidence of three significant findings about China's collective agriculture. First, our results imply that much of the labor supplied to the teams studied was discretionary, and not a response to coercive work norms. Second, and a corollary to the first result, is the implication that another significant portion of labor supplied was so coerced. Third, and finally, we find support for theoretical models which predict that labor could be oversupplied because marginal payments reflected labor's average net product rather than its marginal product.

Butcher, Kristin F.

PD February 1991. **TI** Immigration and Wages: Evidence from the 1980's. **AU** Butcher, Kristin F.; Card, David. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 281; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 19. **PR** $2.00. **JE** F22, J61, J31. **KW** Immigration. Wage Determination. Wages. Migration.

AB More immigrants entered the United States during the 1980's than in any comparable period since the 1920's. Although at a national level the inflow rates were relatively modest, most of the newly arriving immigrants settled in only a handful of cities. In this paper, we study the effects of immigration during the 1980's on the evolution of wages within a sample of 24 major cities. We concentrate on changes in wages for relatively low-paid workers, and on changes in the gap between highly-paid and low-paid workers. Our analysis reveals significant differences across cities in the relative growth rates of wages for low-paid and highly-paid workers. However, the relative growth rates of wages at the low end of the earnings distribution bear little or no relation to the relative size of immigrant inflows to different cities.

Butz, David A.

PD February 1991. **TI** What do Large Shareholders do? **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 613; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 27. **PR** $2.50; checks payable to U.C. Regents. **JE** G32, G34, L21, M21. **KW** Shareholders. Takeover.

AB This paper models a large shareholder with a credible takeover threat. Management recognizes that this shareholder has more to gain from a takeover when it owns 30% of the firm than when it owns 20% and that to preempt a takeover it must therefore make more concessions in the former case than in the latter. The large shareholder recognizes that by raising its stake from 20% to 30% it can wrest more concessions from management. In comparison to earlier work where ownership stakes have no bearing on managerial concessions, large shareholders here have greater incentives to monitor the firm, purchase shares, and resolve their differences with management without dismissing them and without resort to costly takeover. Outsiders also have greater incentives to monitor the firm and

purchase foothold stakes.

PD March 1991. **TI** Free Cash Flow Theory without the Free Cash Emphasis. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 614; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 20. **PR** $2.50; checks payable to U.C. Regents. **JE** G34, G32. **KW** Corporate Debt. Leveraged Buyouts. Takeover.
AB This paper raises three related problems with Michael Jensen's (1986) hypothesis that agency problems surrounding free cash can explain many leveraged buyouts, takeovers, and recapitalizations. First, it questions the wisdom of focusing on free cash rather than a broader class of discretionary assets that could give rise to the same agency conflict. Second, it illustrates how curtailing such discretionary assets can aggravate these agency problems. Third and most important, debt may not effectively bond managerial promises to disgorge resources even where such action is warranted unless far more is issued than Jensen suggests. This paper argues that debt more often serves as a credible commitment to sell assets that have performed poorly, and it shows how this debt must be structured. This commitment works regardless of why the assets have not fared well - cash may or may not be involved.

PD March 1991. **TI** Bust-up Takeover Bids and Asymmetric Information. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 615; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 22. **PR** $2.50; checks payable to U.C. Regents. **JE** G34, G32. **KW** Takeover. Private Information.
AB This paper models two-stage takeovers: Bidders incur costs (that only they know) when making a tender offer and additional costs if they then take control. Low-cost bidders make offers to signal these costs. If management responds with a credible restructuring plan the bidder withdraws - yet considers the outcome a success. This outcome depends on the probability that the bidder has low takeover costs, the timing of costs (pre-offer versus post-offer), managerial risk aversion, and bidder cost differences. Among the conclusions is that where tender offers are relatively inexpensive, even highly risk averse incumbent managers have little reason to preempt bidders.

Caballero, Ricardo J.

PD November 1990. **TI** Dynamic (S,s) Economies. **AU** Caballero, Ricardo J.; Engel, Eduardo M. R. A. **AA** Caballero: Columbia University. Engel: Universidad de Chile. **SR** Columbia Department of Economics Working Paper: 508; Department of Economics, Columbia University, New York, New York 10027. **PG** 35. **PR** $5.00. **JE** C43, C82, O41. **KW** Aggregation. Macroeconomic Model. Growth Model.
AB In this paper we provide a framework to study the aggregate dynamic behavior of an economy where individual units follow (S,s) policies. We characterize structural and stochastic heterogeneities that ensure convergence of the economy's aggregate to that of its frictionless counterpart, determine the speed at which convergence takes place, and describe the transitional dynamics of this economy.

PD November 1990. **TI** Durable Goods: An Explanation for Their Slow Adjustment. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 507; Department of Economics, Columbia University, New York, New York 10027. **PG** 24. **PR** $5.00. **JE** D12, D91, C43. **KW** Durable Goods. Permanent Income Hypothesis. Consumption. Aggregation.
AB Aggregate expenditure on durables responds too slowly to wealth and other aggregate innovations to be consistent with the simplest frictionless version of the permanent income hypothesis. In this paper I present a model of aggregate expenditure on durables that builds up from the lumpy nature of microeconomic purchases, and provide evidence supporting its contribution to the resolution of the "slowness" puzzle. The paper also contains several new results on the problem of dynamic aggregation of stochastically heterogeneous units.

PD November 1990. **TI** On the Target Relation between Capital and its Cost: Small Sample Bias and Adjustment Costs. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 506; Department of Economics, Columbia University, New York, New York 10027. **PG** 13. **PR** $5.00. **JE** E22, G31, G32. **KW** Adjustment Costs. Capital. Macroeconomic Model.
AB The response of most stock variables (e.g. capital, housing, consumer durables, and prices) to exogenous impulses involve a dynamic or "short-run" reaction, and a target or "long-run" reaction. The difference between these two is typically attributed to some form of adjustment cost. Under certain circumstances, conventional cointegration procedures may appear as the right way to estimate the second component without worrying about the first one. The main point of the paper is that in practice, whenever the distinction between "short" and "long" run is interesting, the previous statement is likely to be misleading. I illustrate the empirical relevance of this by showing that the target elasticity of capital with respect to its cost is severely downward biased when estimated with conventional cointegration procedures. Once this is corrected, the target share of capital in U.S. value added appears to be well approximated by a constant.

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

PD February 1991. **TI** Fuzzy Preferences and Aggregate Consumption. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 520; Department of Economics, Columbia University, New York, New York 10027. **PG** 17. **PR** $5.00. **JE** D91, D11, D12, E21. **KW** Permanent Income Hypothesis. Consumption. Consumer Economics.
AB The simple frictionless permanent income model provides a good description of the medium to long-run behavior of aggregate non-durables consumption, while it fails in describing its dynamic behavior. I propose a model where heterogeneous microeconomic units do not update their consumption patterns continuously, and show its potential relevance in accounting for the short-run problems of the PIH.

Cagan, Phillip

PD January 1991. **TI** Price Movements as Evidence on the Traditional versus New View of Business Fluctuations. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 511; Department of Economics, Columbia University, New York, New York 10027. **PG** 9. **PR** $5.00. **JE** E32, E31, E13, E12. **KW** Prices. Business Cycle. Economic Fluctuations. Macroeconomic Model.

AB The traditional view of the source of business fluctuations has long focused on nominal demand. In this view fluctuations in nominal aggregate expenditures, owing to changes in spending by consumers, businesses, or government, precipitate business expansions and contractions. Now a new view of business fluctuations denoted "real business cycles" has been expounded that focuses on structural changes in production and consumer or investor preferences deriving principally from technology and input costs and to some extent from government regulations and taxation. The traditional and new views have different implications about the adjustment speed of the price system, The real effects of nominal disturbances such as exogenous changes in the money supply, and the importance of shocks to technology and import cost.

Calem, Paul S.

PD September 1989. **TI** On the Reasons for Gradual Markdowns by Retailers. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 89-29; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 27. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** L13, L81, D43. **KW** Retail Trade. Prices. Market Structure. Market Power. Monopolistic Competition.

AB To even a casual observer, gradual markdowns by retailers are a familiar phenomenon. A recent empirical study by Pashigian (1988) reveals just how prevalent retail price reductions have become. Pashigian (1988) links the expanded use of markdowns by apparel retailers to the industry's transition from a competitive to a more monopolistically competitive environment. Current theories of retail pricing, however, provide only limited support for the notion that monopoly power leads to a declining price over time. The present paper builds on Stokey's (1979) model to derive an expanded role for intertemporal price reduction. Two extensions of the Stokey model are considered. The first allows for uncertainty regarding the retailer's ability to supply the product in question in future periods. The second extension incorporates competition from the seller of a substitute product. Price reductions are shown to be a general outcome of the Bertrand equilibrium.

PD October 1989. **TI** Are Bank Loans Unique? The Case of Hospital Debt Financing. **AU** Calem, Paul S.; Rizzo, John A. **AA** Calem: Federal Reserve Bank of Philadelphia. Rizzo: National Center for Health Services Research and Health Care Technology Assessment. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 89-30; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 34. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** I11, G32. **KW** Banks. Capital Markets. Health Care Markets. Hospitals. Corporate Debt.

AB Financial theorists have argued that banks play a unique role in capital markets, either in evaluating borrower prospects ex ante or monitoring borrower behavior ex post. Except among the most creditworthy firms, greater reliance on bank loans versus other sources of financing, such as bond issues, is expected to correlate directly with profits, other factors being equal. Using a unique data set from the hospital industry, this study presents a multivariate analysis of the relationship between debt financing mix and hospital profitability.

PD February 1991. **TI** Reputation Acquisition, Collateral, and Moral Hazard in Debt Markets. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 91-5; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 33. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** L14, G32, G33, D21. **KW** Corporate Debt. Borrowing. Bankruptcy.

AB The reward from building and maintaining a "reputation" can provide a powerful incentive affecting the behavior of a firm or other economic agent. In particular, reputation incentives may have a favorable impact on situations involving moral hazard. Diamond (1989) analyzes how reputation effects may eliminate a moral hazard problem in debt markets. In Diamond's model, a borrower relies on a sequence of loans. Each period's loan contract calls for a payment to the lender at the end of the period, failing which the borrower suffers default and liquidation. Some borrowers have the option of choosing a risky project, contrary to the best interests of the lender. But in doing so, these borrowers risk losing access to the loan market, since a default would become part of the borrower's credit history. In Diamond's model, borrowers do not have any capital of their own. Hence, they are unable to offer down payments or collateral on loans. The present paper represents a first attempt to examine the role of collateral in a multi-period setting with reputation effects.

PD February 1991. **TI** Financing Constraints and Investment: New Evidence from the U.S. Hospital Industry. **AU** Calem, Paul S.; Rizzo, John A. **AA** Calem: Federal Reserve Bank of Philadelphia. Rizzo: U.S. Department of Health and Human Services. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 91-4; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 26. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** G31, G32, I11. **KW** Financing. Hospitals. Capital Investment. Business Cycle.

AB Recent research on capital markets has argued that agency costs may limit a firm's access to external finance (Jensen and Meckling, 1976; Stiglitz and Weiss, 1981). The implication is that internal and external sources of finance may not be perfect substitutes for some firms. As a result, investment may vary depending upon the availability of internal funds. A growing empirical literature has examined whether investment depends upon the availability of internal funds. These studies typically estimate an investment equation and employ a split-sample approach. The studies test for a stronger effect of liquidity among firms which, a priori, seem likely to face substantial agency costs in capital markets. The present study utilizes data from a single industry. This permits a more reliable test of the liquidity/investment relationship based upon split samples. It also allows us to test the hypothesis that investment constraints become manifest only at high levels of investment.

Card, David

TI Immigration and Wages: Evidence from the 1980's. **AU** Butcher, Kristin F.; Card, David.

Carlino, Gerald A.

PD October 1989. **TI** Accounting for Differences in Aggregate State Productivity. **AU** Carlino, Gerald A.; Voith, Richard. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-1; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 31. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** O47, O41, O11. **KW** Productivity. Growth Model. Education. Infrastructure. Industrialization.

AB The purpose of this paper is to analyze the determinants of aggregate productivity at the state level by utilizing the new GSP data. State differences in aggregate productivity are modeled as a Hicks-Neutral shifter term in an aggregate production function framework. The model attempts to account for variations in aggregate productivity resulting from state-to-state differences in industry structure, quality of the labor force, and public investment in infrastructure. In addition, a fixed-effects extension of the model is employed to capture the effects on state productivity of other important localized factors (such as agglomeration economies and degree of unionization) that are not directly entered into the empirical model. The findings indicate that a state's fixed-effects and its industrial structure are the more important determinant of its productivity. The study also finds that a state's investment in infrastructure (highways) and expenditures on education contribute positively to productivity, but to a lesser extent than the other productivity factors.

PD October 1989. **TI** Regional Impacts of Exchange Rate Movements. **AU** Carlino, Gerald A.; Cody, Brian J.; Voith, Richard. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-6; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 24. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** R11, R13. **KW** Regional Economics. Economic Growth. Exchange Rate.

AB The combination of a tight anti-inflationary U.S. monetary policy, a rapidly expanding federal budget deficit, and an improved outlook for investment in the U.S. led to an unprecedented appreciation of the dollar in the early 1980's. Between 1980 and mid-1985, the real value of the dollar appreciated by over 45 percent on a trade-weighted basis. This appreciation translated into a severe reduction in the competitiveness of U.S. export and import-competing industries. The volatility of the dollar during the 1980's has raised questions over the impact of exchange rate movements on a region's economy. Since many industries tend to be concentrated geographically because of nearness to markets and gravitation to inputs, industrial mixes vary widely across regions of the country. This variety suggests that regions may respond differentially to a given change in the value of the dollar.

PD November 1990. **TI** Persistence and Convergence in Relative Regional Incomes. **AU** Carlino, Gerald A.; Mills, Leonard O. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-23; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 55. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** E32, E25, R11. **KW** Income Distribution. Regional Economics. Business Fluctuations. Income. Economic Growth.

AB After decades of apparent convergence, regional per capita incomes appear to have diverged sharply in the 1980's. A central tenet of the convergence hypothesis is that shocks to relative regional incomes are transitory. If regional shocks are, however, highly persistent, then either convergence takes an extremely long time, or convergence follows a complicated path. Recent research in the analysis of national economic time series may lead one to question the idea that disturbances in relative regional incomes from their long-term trends are transitory. In this paper we investigate whether relative regional incomes are better characterized as transitory fluctuations around a deterministic convergence path or as nonstationary processes that have little or no tendency to return to the deterministic trend.

Carraro, Carlo

PD April 1991. **TI** Environmental Innovation Policy and International Competition. **AU** Carraro, Carlo; Siniscalco, Domenico. **AA** Carraro: Dip. di Scienze Economiche, Universita degli Studi di Venezia. Siniscalco: Istituto di Economia Politica, Milano. **SR** CEPR Discussion Paper: 525; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 32. **PR** Pounds 3.00 or $5.00. **JE** 026, 411, 722. **KW** Environmental Innovation. Asymmetric Information. International Competition. Subsidies.

AB We consider one polluting industry in an open economy. The national government implements a policy of industrial pollution control by inducing appropriate technological innovations to reduce toxic emissions. The emission-reducing innovations are developed through firm-specific costly investments. Under different hypotheses on market structure (perfect competition, Bertrand and Cournot oligopoly) international competition forces the national government to subsidize innovation. The appropriate subsidy scheme varies according to market structure and to the information available to the government. If information is asymmetric, the subsidy must include an information premium to separate different types of firms.

Carroll, Christopher D.

PD February 1991. **TI** Buffer Stock Saving and the Permanent Income Hypothesis. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Economic Activity Section Working Paper Series: 114; Board of Governors of the Federal Reserve System, Economic Activity Section, Stop #80, Federal Reserve Board, Washington, D.C. 20551. **PG** 38. **PR** no charge. **JE** D91, J22, D12, D11. **KW** Permanent Income Hypothesis. Saving. Income.

AB This paper uses the University of Michigan's Panel Survey of Income Dynamics to make estimates of the degree of uncertainty in individual income, then uses these estimates of income uncertainty to calibrate a standard version of the life cycle model. In the face of the high degree of uncertainty observed in the PSID, the standard model predicts unrealistically high saving rates for precautionary reasons. But if the standard assumptions are modified to allow consumers to be more impatient, and less risk averse, than is usually assumed, a new model emerges in which most saving is done to

buffer short-horizon shocks to income. The paper argues that this buffer-stock model of saving is consistent with a broad range of evidence which cannot be explained by the standard life cycle/permanent income model.

Carruth, Alan

PD June 1991. **TI** An Empirical Study of Unemployment and the Number of Children in Care. **AU** Carruth, Alan; Oswald, Andrew. **AA** Carruth: University of Kent. Oswald: Dartmouth College, National Bureau of Economic Research, and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 39; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 23. **PR** no charge. **JE** J13, J64. **KW** Unemployment. Child Care.

AB The paper uses British county data from the 1980's to try to identify the factors which determine the number of children in care. A doubling of unemployment appears to be associated, ceteris paribus, with a rise by two thirds in the number of children in care. In this complex and relatively unexplored field, however, all findings must be treated cautiously.

Chalfant, James A.

TI Marketed Surplus under Risk: Do Peasants Agree with Sandmo? **AU** Finkelshtain, Israel; Chalfant, James A.

TI Aversion to Income Risk in the Presence of Multivariate Risk. **AU** Finkelshtain, Israel; Chalfant, James A.

PD March 1991. **TI** Testing the Translog Specification with the Fourier Cost Function. **AU** Chalfant, James A.; Wallace, Nancy E. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 585; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 45. **PR** $9.00. **JE** L90, R48, L51. **KW** Transportation Costs. Transportation Industry. Regulation.

AB Restructuring trends in transportation markets have intensified the need for analysis of firm level production technologies. Accurate predictions about the outcomes of deregulation necessarily rely on careful portrayals of the production or cost functions of firms operating in these industries. In particular, the economically relevant information sought in empirical studies of the transportation industry is the estimation of substitution and output elasticities of firms. These elasticities portray the underlying structure of production and thus are usually the focus of policy debates concerning the effects of regulatory intervention. The purpose of this paper is to compare two strategies for estimating motor carrier cost functions: a semi-nonparametric approach using the Fourier flexible form developed by Gallant (1981, 1982), and the more common locally flexible approximation, the translog (Christensen, Jorgensen, and Lau, 1973). The comparison will be made using a data set for general motor freight carriers observed immediately prior to deregulation and immediately after deregulation.

Chase-Lansdale, Lindsay P.

TI The Home Environment: A Mechanism through which Maternal Employment affects Child Development. **AU** Desai, Sonal; Michael, Robert T.; Chase-Lansdale, Lindsay P.

Chen, Nai-Fu

PD February 1987. **TI** A Comparison of Single and Multifactor Portfolio Performance Methodologies. **AU** Chen, Nai-Fu; Copeland, Thomas E.; Mayers, David. **AA** Chen: University of Chicago. Copeland and Mayers: University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 2-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 18. **PR** $2.00; checks payable to U.C. Regents. **JE** G11. **KW** Portfolio Choice.

AB A comparison of single and multifactor portfolio performance methodologies using Value Line and size-ranked portfolios indicates that although both methodologies provide unbiased estimates of portfolio performance, there are systematic differences in the power of the two methodologies. The predictive power of the multifactor methodology is superior for well-diversified portfolios but inferior for less diversified portfolios.

Cheng, Leonard

TI The Lack of Pareto Superiority of Unegalitarian Wealth Distributions. **AU** Adelman, Irma; Cheng, Leonard.

TI A Dynamic Model of Personal Wealth and Income Distribution in a Growing Closed Economy. **AU** Adelman, Irma; Cheng, Leonard.

Chichilinsky, Graciela

PD January 1991. **TI** Existence of Equilibrium in Regular Economies with Incomplete Markets. **AU** Chichilinsky, Graciela; Heal, Geoffrey. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-90-292; First Boston Series, Columbia University, New York, NY 10027. **PG** 7. **PR** not available. **JE** D52, D51, D46. **KW** Incomplete Markets. Spot Market. Competitive Equilibrium.

AB This paper presents a simple and transparent proof of the existence of an equilibrium in incomplete markets, using properties of strictly regular economies. It also classifies topologically the space of spot prices and asset returns which clear the spot markets.

PD January 1991. **TI** Competitive Equilibrium in Soboley Spaces with Unbounded Short Sales. **AU** Chichilinsky, Graciela; Heal, Geoffrey. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-90-291R; First Boston Series, Columbia University, New York, NY 10027. **PG** 22. **PR** not available. **JE** D51, D46. **KW** Competitive Equilibrium. Preferences. Endowments. Consumption.

AB Using results of Chichilinsky [1977] and Chichilinsky and Kalman [1980], we prove existence and Pareto optimality of a competitive equilibrium when commodity spaces are infinite dimensional Sobolev spaces. These are Hilbert spaces which include L(2) as a special case. We give sufficient conditions for existence on individual characteristics, e.g. endowments and preferences. The model includes the possibility of unbounded short sales, and allows general consumption sets. Prices are in the same space as commodities. L(infinity) and the space of continuous functions C(R) are dense subspaces of the commodity space.

PD January 1991. **TI** Necessary and Sufficient Conditions

for Pareto Efficiency of Equilibrium in Non-Convex Economies. **AU** Chichilinsky, Graciela; Heal, Geoffrey. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-90-290; First Boston Series, Columbia University, New York, NY 10027. **PG** 9. **PR** not available. **JE** D46, D51. **KW** Consumption. Prices. Marginal Cost. Preferences.

AB Theorems 1 and 2 give conditions on the preference profiles of a non-convex economy that are necessary and sufficient to ensure that at least one marginal cost pricing equilibrium is Pareto efficient. These conditions are that the preference profile is affinely homothetic and identical, i.e. that all individual preferences in it are affine translations of a given homothetic preference. This condition was shown by Chichilinsky and Heal (1983) to be necessary and sufficient for the completeness and transitivity of community preferences as defined by Scitovsky (1941) Gorman (1953) and Samuelson (1956). It is also equivalent to the condition that with strictly positive consumption vectors the aggregate demand is independent of the distribution of endowments. Theorem 3 gives an additional condition on the economy which is sufficient to ensure that all marginal cost pricing equilibria are Pareto efficient. This condition is on the relationship between preferences and production sets. It amounts to a requirement that the economy be diffeomorphically convex.

PD February 1991. **TI** Necessary and Sufficient Conditions for Pareto Efficiency of Equilibrium in Non-Convex Economies. **AU** Chichilinsky, Graciela; Heal, Geoffrey. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 518; Department of Economics, Columbia University, New York, New York 10027. **PG** 9. **PR** $5.00. **JE** D51, D24, D41. **KW** Preferences. Production. Firm Behavior. Marginal Cost Pricing.

AB Theorems 1 and 2 give conditions on the preference profiles of a non-convex economy that are necessary and sufficient to ensure that at least one marginal cost pricing equilibrium is Pareto efficient. These conditions are that the preference profile is affinely homothetic and identical, i.e. that all individual preferences in it are affine translations of a given homothetic preference. This condition was shown by Chichilinsky and Heal (1983) to be necessary and sufficient for the completeness and transitivity of community preferences as defined by Scitovsky (1941) Gorman (1953) and Samuelson (1956). It is also equivalent to the condition that with strictly positive consumption vectors the aggregate demand is independent of the distribution of endowments. Theorem 3 gives an additional condition on the economy which is sufficient to ensure that all marginal cost pricing equilibria are Pareto efficient. This condition is on the relationship between preferences and production sets. It amounts to a requirement that the economy be diffeomorphically convex.

PD March 1991. **TI** On Incomplete Financial Markets. **AU** Chichilinsky, Graciela; Heal, Geoffrey. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 529; Department of Economics, Columbia University, New York, New York 10027. **PG** 7. **PR** $5.00. **JE** D52, G12, D51. **KW** Incomplete Markets. Spot Markets. Asset Prices. Financial Markets.

AB This paper presents a simple and transparent proof of the existence of an equilibrium in incomplete markets, using properties of strictly regular economies. It also classifies topologically the space of spot prices and asset returns which clear the spot markets.

PD March 1991. **TI** Competitive Equilibrium in Sobolev Spaces with Unbounded Short Sales. **AU** Chichilinsky, Graciela; Heal, Geoffrey. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 526; Department of Economics, Columbia University, New York, New York 10027. **PG** 22. **PR** $5.00. **JE** D51, C62. **KW** Competitive Equilibrium. Exchange Economies.

AB Using results of Chichilinsky [1977] and Chichilinsky and Kalman [1980], we prove existence and Pareto optimality of a competitive equilibrium when commodity spaces are infinite dimensional Sobolev spaces. These are Hilbert spaces which include L(2) as a special case. We give sufficient conditions for existence on individual characteristics, e.g. endowments and preferences. The model includes the possibility of unbounded short sales, and allows general consumption sets. Prices are in the same space as commodities. L(infinity) and the space of continuous functions C(R) are dense subspaces of the commodity space.

Chou, Chien-fu

PD April 1991. **TI** The Environment and International Trade. **AU** Chou, Chien-fu; Melmed-Sanjak, Jolyne; Shy, Oz. **AA** Chou and Melmed-Sanjak: State University of New York at Albany. Shy: Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 17-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 17. **PR** no charge. **JE** F01, Q20, F11. **KW** International Trade. Environment. Pollution. Trade Model.

AB The relationship between international trade and environmental degradation is analyzed in this short paper. Environmental attributes are modeled as differentiated, non-tradable goods. The results derived from the model indicate that when consumers view consumption goods and environmental attributes as substitutes and if consumers place a relatively higher value on environmental variety than on commodity variety, the opening of trade may reduce the welfare of the trading countries. A net welfare loss may occur as exchange gains from trade are reduced or eliminated by environmental losses.

Christofides, Louis

PD July 1991. **TI** Efficient and Inefficient Employment Outcomes: A Study Based on Canadian Contract Data. **AU** Christofides, Louis; Oswald, Andrew. **AA** Christofides: University of Guelph, Canada. Oswald: Dartmouth College and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 41; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 29. **PR** no charge. **JE** J23, J51, J41. **KW** Employment. Labor Contracts. Canada. Labor Demand. Bargaining.

AB This paper estimates employment equations based on the traditional labor demand model and modern efficient bargain theory using data drawn from contracts signed in the Canadian private unionized sector between 1978 and 1984. Contrary to the labor demand model predictions, the alternative wage rate is consistently significant and has the negative coefficient predicted by efficient bargain theory. Though a credible labor demand model can sometimes be estimated, the results are sensitive to the assumed market structure and to the introduction of alternative wage and unemployment insurance

variables. Non-nested tests favor efficient bargain specifications.

PD July 1991. **TI** Real Wage Determination and Rent-Sharing in Collective Bargaining Agreements. **AU** Christofides, Louis; Oswald, Andrew. **AA** Christofides: University of Guelph, Canada. Oswald: Dartmouth College and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 42; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 23. **PR** no charge. **JE** J41, J51, J53, J31. **KW** Wages. Collective Bargaining. Labor Contracts. Unemployment.

AB The microeconomic forces that influence real wages are not fully understood. This paper studies pay determination using data on approximately 600 labor contracts. It finds that the real wage is an increasing function of past profitability in the employer's industry, and a decreasing function of the level of unemployment in the employer's region. These results are consistent with rent-sharing theories.

Cicchetti, Charles J.

PD July 1991. **TI** The Use and Misuse of Surveys in Economic Analysis: Natural Resource Damage Assessment under CERCLA. **AU** Cicchetti, Charles J.; Dubin, Jeffrey A.; Wilde, Louis L. **AA** Cicchetti: Putnam, Hayes and Bartlett. Dubin and Wilde: California Institute of Technology. **SR** Caltech Social Science Working Paper: 768; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 33. **PR** no charge. **JE** Q28, Q20, C42. **KW** Contingent Valuation. Surveys. Natural Resources.

AB This paper examines problems with the admissibility of contingent use methodology surveys in natural resource damage assessment cases under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as well as the propriety of their use in formulating public policy. Using a contingent use survey conducted in conjunction with the New Bedford Harbor Superfund case and two follow-up surveys, a number of errors and biases associated with contingent use methodology surveys are isolated and analyzed.

Clavijo, Fernando

TI The Fallacy of Composition Argument: Does Demand Matter for LDC Manufactured Exports?. **AU** Faini, Riccardo; Clavijo, Fernando.; Senhadji-Semlali, Abdel.

Cody, Brian J.

TI Regional Impacts of Exchange Rate Movements. **AU** Carlino, Gerald A.; Cody, Brian J.; Voith, Richard.

PD February 1990. **TI** The Role of Commodity Prices in Formulating Monetary Policy. **AU** Cody, Brian J.; Mills, Leonard O. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-2; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 30. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** E31, E32, E52. **KW** Prices. Commodities. Inflation. Monetary Policy.

AB Commodity prices often provide signals about the future direction of the economy especially inflation. It has been argued, therefore, that the information in commodity prices should be used in formulating monetary policy. This paper investigates whether a systematic monetary policy response to contemporaneous commodity price shocks would have helped in stabilizing the postwar U.S. economy. Our findings suggest that systematically responding to unexpected commodity price movements would lower the average rate of inflation and reduce variability in both inflation and real growth.

PD July 1990. **TI** Seigniorage and the European Community: Is European Economic and Monetary Union in Danger? **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-19; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 27. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** F33, F36, F15. **KW** Inflation. Europe. Monetary Policy. Seigniorage.

AB Inflation differentials in Europe have narrowed substantially since the inception of the European Monetary System in 1979. However, their persistence after ten years raises the question of why these differentials are so difficult to eliminate. If some EC countries systematically use monetary finance while others do not, then it may prove difficult to achieve the convergence of monetary policies and inflation rates required for irrevocably fixed exchange rates in Europe. Based on a model of seigniorage policy that minimizes the social cost of financing government expenditures, this paper examines monetary finance in the European Community. It uncovers no evidence that seigniorage policies in the EC would endanger the goal of economic and monetary union.

PD December 1990. **TI** Monetary and Exchange Rate Policies in Anticipation of a European Central Bank. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-29; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 46. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** F15, F36, F33, F31. **KW** Economic Integration. Europe. Exchange Rate. European Monetary System. Monetary Policy.

AB With the European Community looking forward to the creation of the single market on January 1, 1993, the question of how to obtain the stated goal of economic and monetary union in Europe has come to the fore. Three stages towards this goal are outlined in the report of the Delors Commission (April 12, 1989), which had been directed by the European Council at its June 1988 meeting on Hanover to consider institutional reforms. The first stage would essentially consolidate the past gains of the EMS by furthering economic convergence within the system. The major institutional reforms, including the creation of a fully functioning European System of Central Banks and the establishment of irrevocably fixed parities, would follow in the second and third stages.

Cohen, Daniel

PD April 1990. **TI** Price and Trade Effects of Exchange Rates Fluctuations and the Design of Policy Coordination. **AU** Cohen, Daniel; Wyplosz, Charles. **AA** Cohen: CEPREMAP. Wyplosz: INSEAD. **SR** CEPREMAP Discussion Paper: 9010; CEPREMAP, 142 rue du Chevaleret,

75013 Paris, FRANCE. **PG** 25. **PR** 20 F. **JE** E61, F15, F31. **KW** Inflation. Policy Coordination. Exchange Rate. Monetary Policy.

AB We analyze the coordinated and uncoordinated response of the monetary and fiscal policies of a 2 country zone to a joint inflationary shock. We show that the (standard) conclusion according to which the exchange rate of the zone with respect to the rest of the world is unduly appreciated (when policies are not coordinated) hinges in fact on a specific assumption: it must be that, within the two countries considered, the price effect of exchange rate fluctuations dominates the trade effects relatively to the corresponding forces at work with respect to the rest of the world. If the relative hierarchy goes the other way around (as we argue is often likely) then the standard conclusion is reversed. We then analyze the impact of an asymmetric shock and analyze what happens when monetary policies alone are coordinated.

PD April 1990. **TI** Which Rules Rather than Discretion in a Democracy? I. An Axiomatic Approach with Open-Loop Commitments. **AU** Cohen, Daniel; Michel, Philippe. **AA** Cohen: CEPREMAP and Universite de Nancy II. Michel: Universite de Paris-I. **SR** CEPREMAP Discussion Paper: 9008; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 21. **PR** 20 F. **JE** D72, D78. **KW** Voting. Policy Implementation. Government Policy. Political Processes.

AB This paper sets a framework for analyzing how memoriless voters may come to elect and re-elect a committed policy-maker. Policy-makers, we assume, are trusted to implement the policy that they announce ex ante (and do implement it, if elected and re-elected). Voters, however, are never bound by their previous votes. With no restrictions imposed on the ex ante announcements of the policy-makers, no commitment is, in general, feasible. (As we argue in the text, the Barro-Gordon framework is an exception). What we show in the paper is how a (natural) set of axiomatic restrictions imposed on the set of policy announcements may yield an unambiguous stationary state towards which all policy announcements will agree on converging to.

Cohen, Darrel

PD February 1991. **TI** A Critical Analysis of Eisner-Pieper Fiscal Measure. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Economic Activity Section Working Paper Series: 117; Board of Governors of the Federal Reserve System, Economic Activity Section, Stop #80, Federal Reserve Board, Washington, D.C. 20551. **PG** 17. **PR** no charge. **JE** E62, E61, D91, D21. **KW** Fiscal Policy. Aggregate Demand. Budget Deficit.

AB The paper presents theoretical and empirical results suggesting that those economists comfortable with a mainstream short-run model of aggregate demand with life cycle consumers should reject the real high-employment budget deficit (RHEB)--a measure developed by Eisner and Pieper--as a summary indicator of the short-run demand effects of fiscal policy. Although the RHEB does capture the impact of increments to private wealth on consumption demand, it does not reflect the other standard channels of influence of fiscal actions on aggregate demand. An alternative measure is derived that captures all of these influences on aggregate demand; this measure is a linear combination of the RHEB and a slightly modified version of the fiscal impact measure derived by Blinder and Solow several years ago.

Cole, Rebel A.

PD October 1990. **TI** The Causes and Costs of Thrift Institution Failures: A Structure-Behavior-Outcomes Approach. **AU** Cole, Rebel A.; McKenzie, Joseph A.; White, Lawrence J. **AA** Cole: Federal Reserve Bank of Dallas. McKenzie: Federal Housing Finance Board. White: New York University. **SR** New York University Salomon Brothers Center Working Paper: S-90-26; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 37. **PR** $5.00. **JE** G33, G21, G11. **KW** Banking. Commercial Banks. Portfolio Choice. Bankruptcy.

AB This paper tests several hypotheses concerning the failure of thrift institutions and the costs of these failures. The central hypothesis posits that the outcomes of the 1986-1989 period were, in large part, influenced by portfolio decisions made by thrifts in the mid-1980's that, in turn, were influenced by structural characteristics facing these thrifts in the early 1980's. Portfolio choices are found to explain both failure and the cost of failure better than most structural characteristics. These portfolio choices, however, are themselves influenced by the structural characteristics. The sample consists of 621 failed or soon-to fail thrifts complete with estimated cost of liquidation and 1654 healthy thrifts. The cost specification uses the Heckman technique to correct for sample selectivity bias.

Coleman, Mary T.

PD March 1991. **TI** Movements in the Earnings-Schooling Relationship: 1940-1988. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 187; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 32. **PR** no charge. **JE** I21, J31, J24. **KW** Education. Wages. Wage Premium.

AB This study estimates the earnings differential between college and high school graduates, denoted as the college earnings premium, from 1940 to 1988. The average measured premium exhibits a decline in the 1940's, gradual increases in the 1950's and 1960's, a decline in the 1970's and a rise in the 1980's for younger male workers and most female workers. Overall the results indicate that this differential has remained relatively high during this period, even given the concurrent increase in the supply of college graduates. As a result, estimates in the expected trend in the college earnings premium based on relatively short time periods are likely to be misleading. Although the data is not well suited to explaining the observed fluctuations in the college earnings premium, some support is given to the hypotheses that cohort size and the business cycle can influence it.

Coleman, Wilbur John II

PD May 1991. **TI** Precautionary Money Balances with Aggregate Uncertainty. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Papers: 399; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 27. **PR** no charge. **JE** E21, E41, E52, E51. **KW** Velocity. Monetary Policy. Money Demand.

AB This paper studies the dependence of velocity on

stochastic monetary growth in a model where households demand money for both its transactions and precautionary services. The setup consists of a cash-in-advance economy in which individual uncertainty leads households to value money for its insurance against adverse endowment shocks. With stochastic monetary growth the distribution of money balances across households does not settle down to a time invariant distribution, so one aim of this paper is to model this distribution as an endogenous state variable.

Collins, Sean

PD January 1991. **TI** Prediction Techniques for Box-Cox Regression Models. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 148; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 30. **PR** no charge. **JE** C13, C51, C22. **KW** Forecasting. Estimation. Monte Carlo. Regression Model. Transformations.

AB This paper reviews several techniques useful for forming point and interval predictions in regression models with Box-Cox transformed variables. The techniques reviewed--plug-in, mean square error analysis, predictive likelihood, and stochastic simulation--take account of nonnormality and parameter uncertainty in varying degrees. A Monte Carlo study examining their small sample accuracy indicates that only predictive likelihood yields reasonably accurate point and interval predictions. For certain parameters, deterministic point predictions are biased, while plug-in prediction intervals are biased. Stochastic simulation, as usually carried out, leads to badly biased predictions. A modification of the usual approach renders stochastic simulation predictions largely unbiased.

Comanor, William S.

TI Price Oscillations in Oligopoly. **AU** Sweeney, James L.; Comanor, William S.

Copeland, Thomas E.

PD March 1986. **TI** The Effect of Sequential Information Arrival on Prices: An Experimental Study. **AU** Copeland, Thomas E.; Friedman, Daniel. **AA** Copeland: University of California, Los Angeles. Friedman: University of California, Santa Cruz. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 9-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 28. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G14. **KW** Asset Markets. Public Information. Asset Pricing. Market Efficiency.

AB In most contemporary asset markets, traders receive information during the trading day. Some receive a particular piece of information early, some later and perhaps some not at all. Such sequential information arrival has been studied theoretically by Copeland (1976) under the simplifying assumption that traders glean no new information from price changes. Although it has not been cast in a sequential information setting, the Grossman-Stiglitz (1976) theory of fully revealing asset prices makes a striking prediction: if each trader can invert the relationship between asset prices and private information then he will not have to personally receive a message to react optimally to it; asset prices will reveal it. That is, the market exhibits strong form informational efficiency (Fama, 1970) or full aggregation. Thus we have the following important empirical question: to what extent do asset markets with sequential information arrival exhibit strong-form efficiency?.

PD June 1986. **TI** Corporate Spinoffs: Multiple Announcement and Ex-Date Abnormal Performance. **AU** Copeland, Thomas E.; Lemgruber, Eduardo F.; Mayers, David. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 12-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 18. **PR** $2.00; checks payable to U.C. Regents. **JE** G34, G32, M11. **KW** Corporations. Capital Structure.

AB A spinoff splits the assets of the corporation into two parts. Shareholders of the original company receive equity claims in the newly created entity. Thus, shareholders of the parent company find themselves to be owners of two companies after the spinoff. There are a variety of possible motivations for spinoffs. Some are involuntary, being mandated by court action. Others are intended to avoid regulatory constraints by separating a regulated subsidiary from an unregulated parent. Some spinoffs are taxable distributions to shareholders while others are not (and may even have tax benefits; e.g., the formation of real estate or oil royalty trusts). Additionally, the energy hypothesis postulates that the value of the separated parts of the corporation will be greater than the whole because of improved managerial incentives when division managers are on their own, or because the market can better evaluate the separated parts of the firm.

PD September 1986. **TI** The Welfare Effects of Public Information in Both Complete and Asymmetric Information Markets. **AU** Copeland, Thomas E.; Miller, Bruce L. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Accounting Working Paper: 86-13; Anderson Graduate School of Management, University of California, Los Angeles, CA 90024-1481. **PG** 16. **PR** $2.00; checks payable to UC Regents. **JE** G14, D51, D83. **KW** Public Information. Welfare Theory. Exchange Model. Financial Markets.

AB An important theoretical question in financial reporting is under what conditions does (additional) public information increase the welfare of market participants. Research on the question has primarily used the Pareto criterion to measure an increase in welfare and an Arrow-Debreu exchange model of financial markets. When the comparison is a direct one between public information and no public information while assuming the set of securities is the same in both cases, welfare has not been found to increase the public information. Indeed, in some situations no information is Pareto superior to public information. We will consider the welfare effects of public information in the direct comparison single-period case only. The first part of this paper uses the complete market assumption, and we distinguish between (a) conditions where there is no Pareto improvement with information, and (b) conditions where there is a Pareto impairment with information. In both situations we extend previous negative results.

PD September 1986. **TI** The Welfare Effects of Public Information in Both Complete and Asymmetric Information Markets. **AU** Copeland, Thomas E.; Miller, Bruce L. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of

Management Finance Working Paper: 19-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 16. **PR** $2.00; checks payable to U.C. Regents. **JE** G14, D51. **KW** Financial Markets. Public Information. Exchange Economy.
AB An important theoretical question in financial reporting is under what conditions does (additional) public information increase the welfare of market participants. Research on the question has primarily used the Pareto criterion to measure an increase in welfare and an Arrow-Debreu exchange model of financial markets. When the comparison is a direct one between public information and no public information while assuming the set of securities is the same in both cases, welfare has not been found to increase with public information. Indeed, in some situations no information is Pareto superior to public information. The accepted explanation for these negative results is that information can reduce risk-sharing.

TI A Comparison of Single and Multifactor Portfolio Performance Methodologies. **AU** Chen, Nai-Fu; Copeland, Thomas E.; Mayers, David.

PD February 1987. **TI** The Market Value of Information: Some Experimental Results. **AU** Copeland, Thomas E.; Friedman, Daniel. **AA** Copeland: University of California, Los Angeles. Friedman: University of California, Santa Cruz. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 5-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 30. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G14. **KW** Private Information. Asset Markets. Market Efficiency.
AB A rational individual values information to the extent that the expected utility he or she obtains from making an optimal informed decision exceeds the expected utility obtained from an optimal uninformed decision. In a competitive economy the market value of a message that can be privately purchased is the monetary equivalent of its information value to a marginal individual. This much is conceptually straightforward. Matters become interesting when the behavior of an individual purchasing the message may partially or fully reveal its contents to non-purchasers, as may be the case in competitive asset markets. This paper investigates the market value of information in such experimental asset markets.

TI A Model of Stock Split Behavior: Theory and Evidence. **AU** Brennan, Michael J.; Copeland, Thomas E.

Cornell, Bradford

PD April 1986. **TI** Pricing Interest Rate Swaps: Theory and Empirical Evidence. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 7-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 14. **PR** $2.00; checks payable to U.C. Regents. **JE** G31, G32. **KW** Debt Swap. Corporate Debt. Securities.
AB An interest rate swap is a contract between two parties in which interest payments are based on a notional principal amount, which itself is never paid or received. Instead the parties agree to pay each other the interest which would be due on the notional principal if the underlying securities were bought and sold. One interest payment stream, the floating payment, is tied to a short-term money market rate, such as the treasury bill rate or LIBOR, and adjusted periodically. The other payment stream is fixed for the life of the swap. Both fixed and floating interest payments start accruing on the swap's effective date and cease on the swap's maturity date. The effective date is generally five business days after the trade date.

PD June 1986. **TI** Forecasting the Eleventh District Cost of Funds. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 11-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 19. **PR** $2.00; checks payable to U.C. Regents. **JE** G31, G32, M41. **KW** Interest Rates. Private Debt. Accounting. Treasury Bills.
AB When a floating rate loan is tied to a market rate of interest, such as the rate on one-year Treasury securities, the market value of the loan will equal its par value on each interest reset date. This proposition does not hold if the floating rate loan is tied to an accounting measure, such as the eleventh district cost of funds. When the cost of funds is "too low," relative to market rates, the loans will be worth more than their par value, when the cost of funds is "too high," they will be worth less than par value. The reason that the cost of funds, henceforth CF, can be too low or too high is that it is based on a ratio of the interest paid by thrifts to the book value of their liabilities.

PD December 1986. **TI** The Mispricing of U.S. Treasury Bonds: A Case Study. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 27-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 10. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G14. **KW** Securities. Asset Pricing. Finance Theory. Market Efficiency.
AB One of the longest running and least resolved debates in finance is whether security prices frequently deviate from rational valuations. The view that such deviations commonly occur dates at least to the speculations of Keynes [1936] and Williams [1938]. More modern developments of this idea include the work of Shiller [1981], Arrow [1982] and De Bondt and Thaler [1985]. De Bondt and Thaler also discuss evidence in support of the hypothesis and present new results of their own. The debate remains unresolved primarily for two reasons. First, except in situations where arbitrage arguments can be applied to derivative securities valuation models do not make specific predictions regarding rational prices. Therefore, actual and theoretical prices cannot be directly compared and indirect tests are required. The second problem, as Summers [1982, 1986] stresses, is that these indirect tests have very little power against a variety of important alternative hypotheses to market efficiency.

PD May 1987. **TI** Cross Sectional Regularities in the Response of Stock Prices to Bond Rating Changes. **AU** Cornell, Bradford; Landesman, Wayne; Shapiro, Alan C. **AA** Landesman and Cornell: University of California, Los Angeles. Shapiro: University of Southern California. **SR** University of California at Los Angeles Anderson

Graduate School of Management Finance Working Paper: 7-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 28. **PR** $2.00; checks payable to U.C. Regents. **JE** G12. **KW** Stock Prices. Stock Market.
AB In traditional event studies, security prices are assumed to respond solely to the receipt of information by investors. This study provides an empirical test of the stakeholder model of Cornell and Shapiro [1987] which suggests that investors also respond to the reaction of non-investor stakeholders firm related events. In particular, this study examines the stock price reactions to bond rating changes during the period from 1982 to 1985. A variable used to measure net organizational capital is found to have significant explanatory power in cross-sectional regressions for the set of rating downgrades.

PD November 1987. **TI** The Impact of Data Errors on Measurement of the Foreign Exchange Risk Premium. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 14-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 16. **PR** $2.00; checks payable to U.C. Regents. **JE** F31, G15. **KW** Exchange Rate. Futures Market. International Markets.
AB The hypothesis that forward exchange rates are unbiased predictors of future spot rates, henceforth UPH, has been rejected in a wide variety of recent papers. Fama [1984], Hansen and Hodrick [1980, 1983] Hseih [1984], Hodrick and Srivastava [1984, 1987], and Korajczyk [1985] all conclude that forward rates differ from expected future spot rates by a time varying risk premium. There are, however, reasons to believe that the case for the foreign exchange risk premium may be overstated. Gregory and McCurdy [1984, 1986] show that the regression equations used to test for the existence of a risk premium are typically misspecified and are sensitive to the choice of the sample period. They find that for sample periods during which the specification criterion are satisfied, UPH cannot be rejected. This paper focuses on another flaw in the traditional tests that also can lead to spurious rejection of UPH.

TI Measuring the Cost of Corporate Litigation: Five Case Studies. **AU** Engelmann, Kathleen; Cornell, Bradford.

PD December 1987. **TI** Measuring the Term Premium: An Empirical Note. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 2-88; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 8. **PR** $2.00; checks payable to U.C. Regents. **JE** E43. **KW** Term Structure. Interest Rates.
AB In the literature on the term structure of interest rates, two definitions of the term premium have historically been employed. According to the first definition, which is commonly used in finance, the term premium equals the difference between the expected holding period return on an n-period, risk-free bond and the one-period, risk-free rate. According to the second definition, which comes from the early development of the expectations hypothesis, the term premium equals the difference between the forward rate and the expected future spot rate. Our results show that, the two definitions of the premium are empirically indistinguishable.

Cowan, Robin A.

PD February 1991. **TI** The Genetic-Causal Moment in Economic Theory. **AU** Cowan, Robin A.; Rizzo, Mario J. **AA** New York University. **SR** New York University Economic Research Reports: 91-13; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 36. **PR** no charge. **JE** B41, B22, B21, A12. **KW** Economic Methodology. Causation. Economic Thought. Genetics.
AB This paper analyzes the role of causation (specifically, genetic causation) in economics. The first two major sections discuss the importance of causation and its evolution in the history of economics. The third section demonstrates that much current neoclassical thinking has "abolished" change and hence the need for causal thinking. Section four develops the major characteristics of causation. The fifth section provides a contrast of genetic causation with other views of causation: functional dependence, predictive capacity and logical implication. Section six discusses many examples of causal models or frameworks. The final section consists of our conclusion.

Cropper, Maureen L.

PD December 1990. **TI** The Determinants of Pesticide Regulation: A Statistical Analysis of EPA Decision-Making. **AU** Cropper, Maureen L.; Evans, William N.; Berardi, Stephen J.; Ducla-Soares, Maria M.; Portney, Paul R. **AA** Cropper: University of Maryland, College Park and Resources for the Future. Evans: University of Maryland, College Park. Berardi, Ducla-Soares and Portney: Resources for the Future. **SR** University of Maryland Department of Economics Working Paper Series: 91-2; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 30. **PR** no charge. **JE** Q12, Q18, Q16. **KW** Regulation. Environment. Pesticides. Government Policy. Agriculture.
AB This paper examines EPA's decision to cancel or continue the registrations of cancer-causing pesticides that went through the Special Review process between 1975 and 1989. For the 242 registered food uses of the pesticides studied, we recorded the risks and benefits of pesticide use, as reported by EPA in official documents. Public comments on the proposed regulations were also recorded. Our analysis indicates that EPA indeed balanced risks against benefits in regulating pesticides: risks to human health and/or the environment increased the likelihood that a particular pesticide use was canceled by EPA; at the same time, the larger the benefits associated with a particular use, the lower was the likelihood of cancellation. Intervention by special interest groups was also important in the regulatory process. Comments by grower organizations significantly reduced the probability of cancellation, whereas comments by environmental advocacy groups increased the probability of cancellation.

Croushore, Dean D.

PD January 1990. **TI** Ricardian Equivalence under Income Uncertainty. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-8; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 23. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** E13, E21, H21. **KW** Ricardian

Equivalence. Income. Taxes.
AB Recent work by Barsky et al. (1986) and Feldstein (1988) suggests that Ricardian equivalence fails to hold when agents face stochastic income shocks. This failure occurs because the tax system provides implicit income insurance. However, it is important to recognize that the magnitude of the effect of taxation as insurance depends on the existing marginal tax rate. In some circumstances, when the tax rate is at its optimal level, Ricardian equivalence still holds.

Danthine, Jean-Pierre

PD March 1991. **TI** Methodological and Empirical Issues in Real Business Cycle Theory. **AU** Danthine, Jean-Pierre; Donaldson, John B. **AA** Danthine: Universite de Lausanne. Donaldson: Columbia University. **SR** Universite de Lausanne Cahiers de Recherches Economiques: 9102; Departement d'Econometrie et d'Economie Politique, Universite de Lausanne, BFSH - Dorigny, CH-1015 Lausanne, SWITZERLAND. **PG** 54. **PR** no charge. **JE** E32, E13, B41. **KW** Business Cycle. Macroeconomics. Economic Methodology.
AB In this paper, we argue that the major impact of the RBC literature has been to propose a new methodology for macroeconomics. This methodology is distinguished first by the importance it attributes to the empirical description of the phenomena to be explained and, second, by the use of this description in conjunction with "quantitative theorizing," i.e., the construction of computable general equilibrium models whose characteristic statistics match those of the data. In accordance with this approach, we first report on the current state of knowledge concerning business cycle regularities and conclude that additional empirical effort is called for in order to arrive at the appropriate basis for theorizing. We then examine the performance of existing models and evaluate the case for integrating monetary factors and demand shocks into them. Lastly we review the recent efforts to explain the employment variability puzzle, and argue that the search for a solution naturally leads to the incorporation of significant non-Walrasian features into the RBC framework.

Davies, Hugh

TI The Pension Consequences of Divorce. **AU** Joshi, Heather; Davies, Hugh.

Davies, Sally M.

PD April 1991. **TI** The Effects of Closure Policies on Bank Risk-Taking. **AU** Davies, Sally M.; McManus, Douglas A. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 158; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 30. **PR** no charge. **JE** G21, G28. **KW** Finance Theory. Banking. Deposit Insurance. Commercial Banks. Regulation.
AB This paper models bank closure policy for a risk averse bank that enjoys flat-rate deposit insurance. We find that increasing the level of net worth at which banks are closed can increase or decrease induced risk aversion, as well as increase the likelihood that marginally healthy banks would be subject to extreme moral hazard. In addition, we find that changes in closure policy can increase or decrease desired leverage and that this effect depends on the degree of correlation among asset returns.

Davis, Steve J.

PD March 1991. **TI** Wage Dispersion between and within U.S. Manufacturing Plants, 1963-1986. **AU** Davis, Steve J.; Haltiwanger, John. **AA** Davis: University of Chicago. Haltiwanger: University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-8; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 45. **PR** no charge. **JE** J31, L60. **KW** Manufacturing. Wages. Wage Structure.
AB This paper exploits a rich and largely untapped source of information on the wages and other characteristics of individual manufacturing plants to cast new light on recent changes in the United States wage structure. Our primary data source, the longitudinal Research Datafile (LRD), contains observations on more than 300,000 manufacturing plants during Census years (1963, 1967, 1972, 1977, 1982) and 50,000-70,000 plants during intercensus years since 1972. We use the information in the LRD to investigate changes in the plant wage structure over the past three decades. We also combine plant level wage observations in the LRD with wage observations on individual workers in the Current Population Survey (CPS) to estimate the between-plant and within-plant components of overall wage dispersion. The main phenomenon motivating our investigation is the dramatic, continuous rise in wage inequality in the United States since the late 1960's.

de Gorter, Harry

PD August 1990. **TI** The Political Economy of Productive and Predatory Policies: A Case Study from Agriculture. **AU** de Gorter, Harry; Nielson, David J.; Rausser, Gordon C. **AA** de Gorter: Cornell University. Nielson and Rausser: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 553; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 38. **PR** $7.60. **JE** Q13, Q18. **KW** Agricultural Policy. Agriculture. Price Supports.
AB Governments intervene in agricultural markets with a mix of policies that can be classified as "productive" or "predatory" (Rausser 1991). Predatory policies, frequently implemented as price supports, are designed to redistribute income from one group to another. Publicly funded research is an important example of a productive policy. Productive policies are designed to improve allocative efficiency. The public choice literature has made a fundamental distinction between these two types of policies but has yet to develop an integrative framework.

De Grauwe, Paul

PD May 1991. **TI** Is Europe an Optimum Currency Area? Evidence from Regional Data. **AU** De Grauwe, Paul; Vanhaverbeke, Wim. **AA** De Grauwe: Katholieke Universiteit Leuven. Vanhaverbeke: IESE, Barcelona. **SR** CEPR Discussion Paper: 555; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 28. **PR** Pounds 3.00 or $5.00. **JE** 423, 432. **KW** Optimum Currency Area. Monetary Union.
AB In this paper we contrast regional and national data on real exchange rate movements, the growth rates of output and employment, labour mobility and unemployment. We find that

asymmetric shocks tend to be more prevalent at the regional than at the national level in Europe. The presumption of the optimum currency area literature holds relatively well, i.e. the adjustment mechanism at the national level involves very little mobility of labour and substantially more real exchange rate variability. At the regional level the opposite holds, although we find some role for real exchange rate adjustments. Finally, we identify two models of regional integration, a 'Northern' and a 'Southern' one. Implications for monetary union in Europe are drawn.

de Janvry, Alain

PD January 1991. **TI** Structural Adjustment and the Peasantry in Morocco: A Computable Household Model Approach. **AU** de Janvry, Alain; Fafchamps, M.; Raki, M.; Sadoulet, E. **AA** de Janvry and Sadoulet: University of California at Berkeley. Fafchamps: Stanford University. Raki: Institut Agronomique et Veterinaire Hassen II. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 577; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 28. **PR** $5.60. **JE** Q11, Q17, Q12, O11. **KW** Morocco. Agriculture. Policy Reform.

AB Moroccan agriculture has been deeply affected in the last decade by implementation of a set of macroeconomic and sectoral policy reforms. These reforms were triggered by the foreign sector crises that followed the end of the Phosphate export boom in the mid-1970s. Initiated in 1983, they included a depreciation of the real exchange rate with the consequent potential of benefiting agriculture as a producer of mostly tradable goods (Morrisson). Additional components of the package of reforms were trade liberalization for agriculture and industry and the privatization or abandonment of a number of activities in which the public sector had been directly involved in agriculture such as the provision of tractor services, seeds, fertilizers, and irrigation water. Starting in 1989, and as part of the negotiations of an agricultural structural adjustment program (ASAP) loan with the World Bank, a new set of rules was introduced for the pricing of grains (soft and hard wheats, barley, and maize). The objective of this paper is to analyze what these new rules for cereals price formation may imply for the weaker segments of Moroccan society, namely the small and medium farmers in nonirrigated areas who account for the majority of the poor.

PD January 1991. **TI** Peasant Household Behavior with Missing Markets: Some Paradoxes Explained. **AU** de Janvry, Alain; Fafchamps, M.; Sadoulet, E. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 578; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 28. **PR** $5.60. **JE** Q11, Q12, Q18. **KW** Households. Peasants. Household Behavior. Agriculture. Agricultural Policy.

AB A model of peasant household behavior, under varying degrees of household-specific food and labor market failures, is constructed to show that these structural features can explain several well known patterns of peasant response which have often been attributed to peculiar motives, presumed specific to peasants. The model explains sluggish response to cash crops prices and high instability in perceived food and labor scarcities; the key role of manufactured consumer goods prices in stimulating peasant's effort in cash crops production; the effectiveness of taxation as opposed to incentives in stimulating cash crops production and the key role of technological change in food production to enhance cash crop production. Results are obtained analytically in the case of one market failure and by numerical simulation with more than one.

de Palma, Andre

TI The Logit as a Model of Product Differentiation: Further Results and Extensions. **AU** Anderson, Simon P.; de Palma, Andre.

Deardorff, Alan V.

PD October 1990. **TI** Growth and International Investment with Diverging Populations. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 90-15; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 26. **PR** not available. **JE** F43, F41, F11. **KW** Growth Model. Capital Mobility. Savings. Open Economy.

AB A two-country, neoclassical, growth model is examined, in which the countries' populations grow at different rates. Individually modeled like the Solow one-sector growth model but with perfectly mobile capital between them, the two countries behave quite differently from the Solow model. The slower growing country may, if it saves enough, grow exponentially in per capita terms, and its rate of growth depends on its savings propensity. It may even acquire a permanently positive fraction of world capital. If it does, the world then behaves like Pasinetti's two-class growth model, where savings of the capitalist class (here, the more slowly growing population) alone determines the steady-state return to capital.

Dell'Omo, Gregory G.

TI A Comparison of Interest Arbitrator Decision-Making in Experimental and Field Settings. **AU** Olson, Craig A.; Dell'Omo, Gregory G.; Jarley, Paul.

Dermine, Jean

PD January 1991. **TI** Economies of Scale and Scope in the French Mutual Funds (SICAV) Industry. **AU** Dermine, Jean; Roller, Lars-Hendrik. **AA** not available. **SR** New York University Salomon Brothers Center Working Paper: S-91-28; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 13. **PR** $5.00. **JE** L11, M21, G23. **KW** Mutual Funds. Firm Size. Diversification.

AB The paper evaluates the economies of scale and scope in the French mutual funds (SICAV) industry. The sample offers the unique characteristic that some firms specialize while others supply several products. The results suggest economies of scale and scope for small institutions and diseconomies for larger firms. An appropriate size for a diversified company is in the range of FF 2.9 billion.

PD April 1991. **TI** Portfolio Selection by Mutual Funds: An Equilibrium Model. **AU** Dermine, Jean; Neven, D.; Thisse, J. F. **AA** Dermine and Neven: INSEAD, France. Thisse: Universite Catholique de Louvain. **SR** New York University Salomon Brothers Center Working Paper: S-91-29;

Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 29. **PR** $5.00. **JE** G11, L11, M21, G23. **KW** Portfolio Choice. Mutual Funds. Securities.

AB We consider an industry in which mutual funds can form portfolios at lower cost than individual investors. Investors can gather their own portfolio from primary securities and/or the shares of the mutual funds. In this context, we model competition between mutual funds as a noncooperative game in which funds select their portfolios. We show that a small number of funds suffices to ensure a Pareto superior equilibrium.

PD May 1991. **TI** The BIS Proposal for the Measurement of Interest Rate Risk, Some Pitfalls. **AA** INSEAD, France. **SR** New York University Salomon Brothers Center Working Paper: S-91-30; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 13. **PR** $5.00. **JE** G21, G28, E43. **KW** Interest Rate. Government Policy. Banking. Regulation.

AB The Basle Committee on Banking Supervision is working on a risk measurement system to evaluate the interest rate risk exposure of banks. It is shown that the current proposal does not avoid twelve pitfalls quite common in interest rate risk measurement systems so that it could give a misleading evaluation of risks. Secondly, it is argued that there are few reasons to harmonize interest rate risk regulations at the international level and that decentralization and delegation to national regulators and supervisors remain appropriate.

PD June 1991. **TI** The Regulation of Financial Services in the EC: Centralization or National Autonomy? **AA** INSEAD, France. **SR** New York University Salomon Brothers Center Working Paper: S-91-31; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 25. **PR** $5.00. **JE** G28. **KW** Regulations. Financial Services. Financial Markets. Government Policy.

AB The paper evaluates the regulatory structure of the European financial services industry. It addresses the issue of hierarchy of regulations, that is the eventual need for centralized regulation at the level of a European Central Bank, Harmonization of National regulations, competitive (de)regulation or "host country" regulation. An economic analysis of the sources of market failure concludes that competition between national regulators will benefit consumers of financial services and the efficiency of financial markets in most cases. The paper warns against an abusive interpretation of the "public interest" criterion which is used too often to restrict competition. Finally, the paper argues that more work remains to be done to achieve open and stable financial markets.

Desai, Padma

PD December 1990. **TI** Soviet Economic Reform: A Tale of Two Plans. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 509; Department of Economics, Columbia University, New York, New York 10027. **PG** 38. **PR** $5.00. **JE** P23, P26, O53, O17. **KW** Soviet Union. Market Economy. Socialism. Economic Development.

AB The Shatalin plan and the Gorbachev plan have for now emerged as the final contenders in the pell mell process of "planomania" on the Soviet scene. The stage is now set for approval of either plan by the republics (except for the Baltic and Russian republics which have already voted in favor of the Shatalin plan). Whatever the outcome, the critical phase of transition to markets in the Soviet economy has begun. In their acceptance of markets, both plans represent a decisive ideological break from the Stalinist planned system. Among the forest of differences, two stand out and provide the framework for the analysis offered below. The first relates to the contrasting conception of union-republic relations, and the division of rights and responsibilities that follows. The second difference relates to the 500-days timetable for the transition in the Shatalin plan and the absence of a Procrustean time frame in the Gorbachev plan.

Desai, Sonal

PD September 1990. **TI** The Home Environment: A Mechanism through which Maternal Employment affects Child Development. **AU** Desai, Sonal; Michael, Robert T.; Chase-Lansdale, Lindsay P. **AA** Desai: RAND Corporation. Michael and Chase-Lansdale: University of Chicago. **SR** Economics Research Center/NORC Population Research Center Discussion Paper: 90-9; Economics Research Center/NORC, 1155 E. 60th St., Chicago, Illinois 60637. **PG** 26. **PR** $2.00; send requests to Librarian, NORC. **JE** J13, J22. **KW** Family. Child Care. Female Labor Supply.

AB Using data from the Child Supplement of the National Longitudinal Survey of Youth, this paper examines one of the mechanisms through which maternal employment affects children. The paper focus on children age 3 through 5. Based on the mother's report and interviewer observation from a short form of the HOME (Home Observational Measurement of the Environment), this paper shows that the cognitive stimulation and the emotional support provided the children has a significant positive effect on their verbal ability. Moreover, the results indicate a positive effect of maternal employment on the cognitive stimulation and the emotional support provided to the child.

Devarajan, Shantayanan

PD May 1990. **TI** Policy Lessons from Two-Sector Models. **AU** Devarajan, Shantayanan; Lewis, Jeffrey D.; Robinson, Sherman. **AA** Devarajan and Lewis: Harvard University. Robinson: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 535; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 46. **PR** $9.20. **JE** F13, F14, F43, F41. **KW** Developing Countries. Two-Sector Models. Trade Policy. Tariff.

AB This paper describes how two-sector models can be used to analyze trade policies in developing countries. We start from a single-country, two-sector, three-commodity model which is an extension of the Salter-Swan "Australian" trade model. This model incorporates imperfect substitution and transformability between goods produced for the domestic and world markets. It provides the theoretical underpinning for most of the trade-focused, single-country, computable general equilibrium (CGE) models developed over the past 10-15 years. Using this model,

we analyze the impact of changes in foreign capital inflows and international prices. We then extend the model, adding factor markets, government policy instruments, and macro aggregates. The extended model is used to analyze the importance of different assumptions about how macro balance is achieved and to explore issues of optimal tax policy.

Diamond, Peter A.

PD January 1991. **TI** Search, Sticky Prices and Inflation with Consumer Differences. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology Department of Economics Working Paper: 573; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 22. **PR** $6.00 Domestic, $8.00 Overseas, $2.00 Student. **JE** D12, D11, D21, D41. **KW** Inflation. Search Model. Market Power. Prices.

AB This paper examines free entry equilibrium in a market with two types of consumers, where consumers search and firms set prices on individual commodity units. The prices attached to newly produced goods are continuously adjusted. Prices attached to previously produced goods cannot be changed. Inflation affects the market power created by the need of consumers to search. A small amount of inflation makes the consumers with low utility of consumption better off. In simulations consumers with high utility are sometimes made better off and sometimes worse off by small amounts of inflation.

Diebold, Francis X.

PD February 1991. **TI** Have Postwar Economic Fluctuations been Stabilized? **AU** Diebold, Francis X.; Rudebusch, Glenn D. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Economic Activity Section Working Paper Series: 116; Board of Governors of the Federal Reserve System, Economic Activity Section, Stop #80, Federal Reserve Board, Washington, D.C. 20551. **PG** 27. **PR** no charge. **JE** E32. **KW** Business Cycle. Business Fluctuations.

AB Previous investigation of whether the volatility of the U.S. economy diminished after World War II have been inconclusive because of the questionable prewar macroeconomic aggregates. We examine, more broadly, the hypothesis of the stabilization of the postwar economy by focusing on the duration of business cycles, rather than their amplitude; in the process, we avoid the debate about the quality of prewar aggregates. Using distribution-free statistics, we find clear evidence of postwar duration stabilization in terms of contractions. Moreover, we find no shift in whole-cycle durations, which suggests a reallocation of the business cycle away from contraction and toward expansion.

Diewert, W. E.

PD May 1991. **TI** Flexible Functional Forms and Tests of Homogeneous Separability. **AU** Diewert, W. E.; Wales, T. J. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-12; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 58. **PR** not available. **JE** D21, D24. **KW** Functional Forms. Profit Function.

AB In this paper we propose and implement empirically tests for homogeneous weak separability using flexible, parsimonious and curvature-correct functional forms. We suggest two methods, both of which are based on normalized quadratic forms. The first is a straight forward implementation of the standard definition of homogeneous weak separability in terms of a standard profit or cost function. The second is an extension of Woodland's [1978] work on separability, which is in terms of a variable profit or variable cost function. We employ both of these methods to test various separability hypotheses with two different U.S. data sets.

PD June 1991. **TI** The Measurement of Productivity in Regulated Industries. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-20; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 75. **PR** not available. **JE** O47, L51, C43, D24. **KW** Productivity. Scale Economies. Regulation. Index Numbers.

AB The paper surveys various methods of productivity measurement in the context of a regulated firm. Hence the productivity measurement technique should not rely on the assumptions of constant (or decreasing) returns to scale in production, since often firms are regulated precisely because it is suspected that their technology sets exhibit increasing returns to scale. Thus the paper reviews existing approaches to the measurement of productivity when there are nonconstant returns to scale in production.

PD June 1991. **TI** Multiproduct Cost Function Estimation and Subadditivity Tests: A Critique of the Evans and Heckman Research on the U.S. Bell System. **AU** Diewert, W. E.; Wales. T. J. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-21; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** not available. **PR** not available. **JE** L43, D24, L11. **KW** Cost Functions. Telecommunications. Monopoly.

AB In this paper we examine the major finding of the Evans and Heckman research on the U.S. Bell System, namely that the Bell System cost function was not subadditive over the period 1958-1971, and hence that the system was not a natural monopoly. We find that although the multiproduct cost function estimated by Evans and Heckman satisfies many of the important requirements of theory, including both monotonicity and concavity in input prices, it fails to satisfy the requirement that it be nondecreasing in outputs. Indeed we find that all of the subadditivity calculations that form the basis for their conclusions involve a violation of this important condition, thus casting considerable doubt on their finding.

Donald, Stephen G.

PD July 1991. **TI** Piecewise Pseudo-Maximum Likelihood Estimation in Empirical Models of Auctions. **AU** Donald, Stephen G.; Paarsch, Harry J. **AA** Donald: University of Florida. Paarsch: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-27; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 40. **PR** not available. **JE** D44, C13, C51. **KW** Auctions. Maximum Likelihood. Game Theory.

AB In applications of game theory to auctions, researchers assume that players choose strategies based upon a commonly

known distribution of the latent characteristics. Rational behavior within an assumed class of distributions for the latent process, imposes testable restrictions upon the data generating process of the equilibrium strategies. Unfortunately, the support of the distribution of equilibrium strategies often depends upon all of the parameters of the distribution of the latent characteristics, making the standard application of maximum likelihood estimation procedures inappropriate. We present a piecewise pseudo-maximum likelihood estimator as well as the conditions for its consistency and its asymptotic distribution.

Donaldson, David

TI Adult Equivalence Scales and the Economic Implementation of Interpersonal Comparisons of Well-Being. **AU** Blackorby, Charles; Donaldson, David.

Donaldson, John B.

TI Methodological and Empirical Issues in Real Business Cycle Theory. **AU** Danthine, Jean-Pierre; Donaldson, John B.

Doran, Howard

PD April 1991. **TI** Multiple Minima in the Estimation of Models with Autoregressive Disturbances. **AU** Doran, Howard; Kmenta, Jan. **AA** Doran: University of New England. Kmenta: University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 91-2; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 6. **PR** not available. **JE** C22, C51, C13. **KW** Autocorrelation. Autoregression. Regression Model.

AB In this paper we show that the problem of multiple minima obtained by using the search procedure in the context of the Cochrane-Orcutt transformation disappears when the observation set is extended to include the first observation, as proposed by Prais-Winsten.

Dubin, Jeffrey A.

TI The Use and Misuse of Surveys in Economic Analysis: Natural Resource Damage Assessment under CERCLA. **AU** Cicchetti, Charles J.; Dubin, Jeffrey A.; Wilde, Louis L.

Dunne, Timothy

PD July 1990. **TI** Wages and the Risk of Plant Closings. **AU** Dunne, Timothy; Roberts, Mark J. **AA** Dunne: Bureau of the Census. Roberts: Pennsylvania State University. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 90-6; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 28. **PR** no charge. **JE** L60, J31. **KW** Manufacturing. Wages. Wage Differentials.

AB This paper examines the empirical relationship between the probability a plant closes and the compensation paid to employees in the plant. The paper uses data on over 6500 manufacturing plants from the LRD to estimate the market hedonic wage locus and the probability of plant failure. The empirical results reported in this paper indicate that the probability of plant failure is systematically related to the plant's market share, age, recent growth, and variable cost to revenue ratio. The market hedonic wage regression indicates that workers employed by multiplant firms earn a positive compensation wage differential for the risk of plant closing but workers employed in single plant firms do not. Additionally, the paper provides evidence on the general pattern of wage variation across heterogeneous employers. Establishment wage rates are significantly affected by plant size, age, geographic location, industry, capital intensity, and value added per worker.

Durlauf, Steven N.

PD January 1990. **TI** Locally Interacting Systems, Coordination Failure, and the Behavior of Aggregate Activity. **AA** Stanford University and National Bureau of Economic Research. **SR** Stanford Center for Economic Policy Research Discussion Paper Series: 194; 100 Encina Commons, Stanford University, Stanford CA 94305. **PG** 61. **PR** no charge for members of non-profit institutions, $3.00 otherwise. **JE** E13, E32, O41. **KW** Coordination Failure. Macroeconomics. Dynamic Model.

AB This paper introduces some models of dynamic coordination failure. The economic environment is characterized by localized complementarities among many agents. The equilibria in these economies may be nonergodic-different global probability measures for economic activity are consistent with the same microeconomic characteristics of agents. In this sense, the microeconomics of the model fail to determine the macroeconomics. The sample paths characterizing different equilibria are Pareto rankable. The equilibria are also consistent with the general results of the empirical unit root literature-considerable persistence exists in macroeconomic aggregates. Our discussion relies on results from a branch of probability theory originally developed to characterize interacting particle systems. The probability theory of these locally interacting systems provides a natural language for describing economy-wide inefficiencies generated by essentially local coordination failures.

PD March 1990. **TI** Time Series Properties of Aggregate Output Fluctuations. **AA** Stanford University and National Bureau of Economic Research. **SR** Stanford Center for Economic Policy Research Discussion Paper Series: 195; 100 Encina Commons, Stanford University, Stanford CA 94305. **PG** 34. **PR** no charge for members of non-profit institutions, $3.00 otherwise. **JE** E23, E32. **KW** Macroeconomics. Output. Time Series. Economic Fluctuations.

AB The last decade has seen an explosion in research on the magnitude of the unit root component in Gross National Product. The many papers exploring this question have come to contradictory conclusions as to the importance of persistent components in characterizing output fluctuations. This divergence of opinion has been generated by the tendency of different researchers to examine different aspects of the behavior of the first differences of output in order to detect deviations from white noise. This paper attempts to explore the complete time series properties of aggregate U.S. output in order to see whether the data are well described as a random walk with drift. A testing methodology based upon the shape of the spectral distribution function is employed.

PD March 1990. **TI** Misspecification in the Cagan Hyperinflation Model. **AU** Durlauf, Steven N.; Hooker, Mark A. **AA** Durlauf: Stanford University and National Bureau of Economic Research. Hooker: Stanford University. **SR** Stanford Center for Economic Policy Research Discussion Paper Series: 193; 100 Encina Commons, Stanford

University, Stanford CA 94305. **PG** 44. **PR** no charge for members of non-profit institutions, $3.00 otherwise. **JE** E31, E51, E41, E32. **KW** Inflation. Money Demand. Economic Fluctuations. Money Supply.

AB This paper explores the specification of hyperinflation models based upon a rational expectations version of the Cagan money demand equation. Rather than estimating and testing the model conditional on a particular money supply specification, we directly measure empirical deviations from the Cagan specification. This misspecification, or model noise, measure is obtained using a signal extraction framework which exploits the similarity of the Cagan model to constant geometric discount frameworks such as the dividend stock price model. Identification of the noise component requires assumptions about the money demand disturbance which turn out to be identical to those commonly used in estimating the model.

Dutta, Bhaskar

PD February 1991. **TI** A Characterization of Egalitarian Equivalence. **AU** Dutta, Bhaskar; Vohra, Rajiv. **AA** Dutta: Indian Statistical Institute. Vohra: Brown University. **SR** Brown University Department of Economics Working Paper: 91-8; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 15. **PR** not available. **JE** D51, D11. **KW** Exchange Economy. Utility Theory. General Equilibrium Model.

AB Consider a solution concept for an economy which satisfies the following criteria: (1) Pareto efficiency, (2) monotonicity, in the sense that if the set of utility possibilities of the economy becomes larger then the solution makes no consumer worse-off, (3) a weak and primitive notion of fairness with respect to some commodity, say commodity h, in the sense that in an exchange economy in which the aggregate endowment consists only of commodity h, the solution is equal division. We show that in the class of economies which includes non-convex technologies the only such solution concept is egalitarian equivalence with respect to commodity h. It is also shown that this characterization of egalitarian equivalence holds in convex economies if we add a weak version of a positive association requirement.

Dutta, Prajit K.

PD February 1991. **TI** Limit Integration Theorems for Monotone Functions with Applications to Dynamic Programming. **AU** Dutta, Prajit K.; Majumdar, Mukul. **AA** Dutta: Columbia University. Majumdar: Cornell University. **SR** Columbia Department of Economics Working Paper: 524; Department of Economics, Columbia University, New York, New York 10027. **PG** 21. **PR** $5.00. **JE** C61, C62. **KW** Monotonicity. Mathematical Economics. Optimization Problem. Dynamic Programming.

AB We prove a variation of Fatou's lemma and an integration to the limit theorem for monotone functions on a partially ordered normed linear space. The motivation comes from "parametric variation" problems in stochastic optimization models of mathematical economics. We discuss possible applications of our results in the dynamic programming framework.

PD February 1991. **TI** A Theory of Stopping Time Games with Applications to Product Innovations and Asset Sales. **AU** Dutta, Prajit K.; Rustichini, Aldo. **AA** Dutta: Columbia University. Rustichini: Northwestern University. **SR** Columbia Department of Economics Working Paper: 523; Department of Economics, Columbia University, New York, New York 10027. **PG** 23. **PR** $5.00. **JE** C73, C72, C70. **KW** Perfect Equilibrium. Game Theory. Nash Equilibrium. Strategy Set.

AB In this paper, the pure strategy subgame perfect equilibria of general stopping time games are studied. It is shown that there always exists a natural class of Markov perfect equilibria, called stopping equilibria. Such equilibria can be computed as a solution of a single agent stopping time problem. A complete characterization of stopping equilibria is presented. Conditions are given under which the outcomes of such equilibria span the set of all possible outcomes from perfect equilibria. Two economic applications of the theory, product innovations and the timing of asset sales, are discussed. Finally, we show that if players can commit themselves for some length of time, subgame perfect Nash equilibrium may fail to exist.

PD February 1991. **TI** (s,S) Equilibria in Stochastic Games with an Application to Product Innovations. **AU** Dutta, Prajit K.; Rustichini, Aldo. **AA** Dutta: Columbia University. Rustichini: Northwestern University. **SR** Columbia Department of Economics Working Paper: 522; Department of Economics, Columbia University, New York, New York 10027. **PG** 42. **PR** $5.00. **JE** C73, C70. **KW** Stochastic Games. Perfect Equilibrium.

AB We study a class of two-player continuous time stochastic games in which agents can make (costly) discrete or discontinuous changes in the variables that affect their payoffs. It is shown that in these games there are Markov perfect equilibria of the two-sided (s,S) rule type. In such equilibria at a critical low state (resp. high state) player 1 (resp. 2) effects a discrete change in the environment. In some of these equilibria either or both players may be passive. On account of the presence of fixed costs (to discrete changes) the payoffs are non-convex and hence standard existence arguments fail. We prove that the best response map satisfies a surprisingly strong monotonicity condition and use this to establish the existence of Markov perfect equilibria.

PD March 1991. **TI** Dynamic Insider Trading. **AU** Dutta, Prajit K.; Madhavan, Ananth. **AA** Dutta: Columbia University. Madhavan: University of Pennsylvania. **SR** Columbia Department of Economics Working Paper: 533; Department of Economics, Columbia University, New York, New York 10027. **PG** 34. **PR** $5.00. **JE** G12, G14. **KW** Insiders. Trading. Stock Market.

AB This paper models trading as a dynamic game between strategic agents with private information, paying particular attention to the role of trading arrangements. We analyze the impact on intertemporal price information of two institutional features: first, price continuity-depth requirements that restrict transaction-to-transaction price changes, and second, the form of order submission. Private information is a common resource that insiders "over-exploit" by trading too quickly. Price continuity rules unable insiders to slowly exploit their information over time. Paradoxically, more stringent price continuity requirements may actually improve market efficiency indirectly by increasing insider profits and inducing more traders to become informed at cost.

PD March 1991. **TI** Maximizing or Minimizing Expected Returns Prior to Hitting Zero. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper:

532; Department of Economics, Columbia University, New York, New York 10027. **PG** 19. **PR** $5.00. **JE** C62, D81. **KW** Dynamic Model. Decision Theory.
AB This paper analyzes the optimal control of a diffusion with absorption at the origin. Unlike previous studies, controls themselves may have immediate payoffs. Existence and characterization results are proved and some illustrative examples are presented.

PD March 1991. **TI** On the Parametric Continuity of Dynamic Programming Problems. **AU** Dutta, Prajit K.; Majumdar, Mukul; Sundaram, Raghu. **AA** Dutta: Columbia University. Majumdar: Cornell University. Sundaram: University of Rochester. **SR** Columbia Department of Economics Working Paper: 531; Department of Economics, Columbia University, New York, New York 10027. **PG** 29. **PR** $5.00. **JE** C61. **KW** Dynamic Model. Linear Programming.
AB We provide several alternative sets of conditions under which the solutions to parametric families of dynamic programming problems are continuous in the parameters. The applicability of these results is illustrated using frequently studied classes of economic models.

PD March 1991. **TI** Collusion, Discounting and Dynamic Games. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 534; Department of Economics, Columbia University, New York, New York 10027. **PG** 22. **PR** $5.00. **JE** C71, C73. **KW** Collusion. Cooperative Games. Repented Games. Dynamic Games.
AB It is commonly believed that the more patient the players in a game, the more likely that they can sustain collusive behavior. We show that this institution, although immediate for purely repeated games, is in general false for dynamic games. We exhibit games in which collusion is possible only if players are sufficiently impatient. Further, there may be dynamic games arbitrarily "close" to repeated games which exhibit such starkly different behavior. We do however show that any equilibrium outcome that is sustainable by less patient players, is also an equilibrium outcome when players are more patient.

Eaton, B. C.

PD May 1991. **TI** Supporting Collusion by Choice of Inferior Technologies. **AU** Eaton, B. C.; Eswaran, Mukesh. **AA** Eaton: Simon Fraser University. Eswaran: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-23; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 31. **PR** not available. **JE** L13, D24, O33, D43. **KW** Collusion. Technology. Oligopoly.
AB This paper demonstrates that, given a choice between convex technologies that are available off-the-shelf and which are ranked in terms of efficiency, an oligopoly may tacitly collude in a supergame to adopt an inefficient technology. Furthermore, we demonstrate that an increase in concentration can lead the oligopoly to adopt a previously-rejected efficient technology. It is shown that this could result in an increase in consumer surplus (in addition to an increase in producer surplus). Similar outcomes are shown to be possible in a model in which there is available only one technology, and in which firms tacitly collude in the choice of capacity. The results of this paper have clear implications for antitrust policy.

Elliehausen, Gregory E.

PD September 1990. **TI** Banking Markets and the Use of Financial Services by Small and Medium-Sized Businesses. **AU** Elliehausen, Gregory E.; Wolken, John D. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Staff Studies Paper: 160; Staff Studies Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 35. **PR** not available. **JE** G21, L22, L44, G18. **KW** Banking. Mergers. Takeovers. Antitrust. Monopoly. Market Structure.
AB A longstanding and contentious problem in the antitrust analysis of proposed bank mergers has been the definition of the geographic area and services that constitute a particular market for financial services. The issues involved can be illustrated by two questions that arise in the following example: A commercial bank wants to acquire another located in the same metropolitan area; considering only the banks in that area, the acquisition apparently would reduce competition for banking services in that locality. First, does the presence of commercial banks outside the area mitigate the anticompetitive effects? Second, would the anticompetitive effects be lessened if nonbank institutions in the area offered some (but not all) of the services offered by the two banks? Any definition of a banking market implies answers to these questions regarding its geographic extent and the scope of services to be included.

Elmes, Susan

PD March 1991. **TI** Equally Informative Games: A Definition and Characterization. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 528; Department of Economics, Columbia University, New York, New York 10027. **PG** 49. **PR** $5.00. **JE** C72, C70. **KW** Game Theory. Extensive Form. Noncooperative Games.
AB For any finite normal form game, there exists an infinite number of game trees representing that normal form game. From the paper of Elmes and Reny, we know that there are three transformations, add, interchange and coalesce, of game trees which characterize the set of game trees with perfect recall representing the same normal form game. In the paper "On the Strategic Stability of Equilibria," Kohlberg and Mertens argue that these transformations of the tree are strategically irrelevant, so that a solution of one extensive form game should be a solution in any other extensive form game which differs by one of these "strategically irrelevant" transformations. In order to better understand the transformations and the arguments presented for the strategic irrelevance of the transformations, this paper characterizes the set of extensive form games which differ by only two of the transformations, interchange and coalesce.

Engel, Eduardo M. R. A.

TI Dynamic (S,s) Economies. **AU** Caballero, Ricardo J.; Engel, Eduardo M. R. A.

Engelmann, Kathleen

PD December 1987. **TI** Measuring the Cost of Corporate Litigation: Five Case Studies. **AU** Engelmann, Kathleen; Cornell, Bradford. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 20-86; Anderson Graduate School of Management,

University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 31. **PR** $2.00; checks payable to U.C. Regents. **JE** K21, K22, G12. **KW** Legal Decisions. Legal System. Asset Prices.

AB On November 19, 1985 a Houston jury found that Texaco had improperly interfered with Pennzoil's plan to buy Getty Oil and directed Texaco to pay Pennzoil $11.1 billion in damages plus interest. In the seven trading days following the verdict the market value of Texaco dropped by $1.8 billion, while the market value of Pennzoil rose only $600 million. As a result, the aggregate market value of the two firms fell by $1.2 billion. This asymmetrical change in the market of the two firms value raises some intriguing questions. In this paper four hypotheses are developed to explain why legal events may cause asymmetrical changes in value of the litigants.

Eswaran, Mukesh

PD May 1991. **TI** Cartel Unity over the Business Cycle: Strength in Weakness. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-22; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 55. **PR** not available. **JE** L13, D43, L14. **KW** Cartels. Collusion. Business Cycle. Bankruptcy.

AB This paper investigates cartel behavior in business cycles when some firms are vulnerable to bankruptcy in the downturns. This vulnerability would restrict the set of collusive equilibria that are feasible in a repeated game, and possibly result in a breakdown, in recessions, of all collusive agreements. It is demonstrated, however, that the existence of a low-cost producer in the cartel could prevent this breakdown. By adjusting market shares across the business cycle (and thereby eliminating the possibility of bankruptcy for its inefficient rivals), this ("swing") producer could enlarge the set of self-enforcing collusive equilibria. Further, since weak rivals collude more readily than strong ones, an increase in the severity of recessions, which exposes previously solvent firms to the possibility of bankruptcy, could strengthen the cartel and increase industry profits. The results of this paper are seen to be consistent with a wide range of observations on the behavior of cartels over the business cycle.

TI Supporting Collusion by Choice of Inferior Technologies. **AU** Eaton, B. C.; Eswaran, Mukesh.

Evans, Martin

PD May 1991. **TI** Were Price Changes during the Great Depression Anticipated? Evidence from Nominal Interest Rates. **AU** Evans, Martin; Wachtel, Paul. **AA** Evans: New York University and University of Michigan. Wachtel: New York University. **SR** New York University Salomon Brothers Center Working Paper: S-91-25; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 27. **PR** $5.00. **JE** E31, E32, N12, E63. **KW** Inflation. Business Cycle. Price Level. Monetary Policy.

AB This paper reassesses whether the large swings in prices during the 1930's were anticipated. We argue that uncertainty about monetary, fiscal and exchange rate polices induced systematic differences between the expected rate of price change held by economic agents at the time and the time series forecasts of inflation. Our analysis of nominal interest rates and ex post inflation strongly support this view. In fact, our results suggest that the deflation of the early Depression years and the inflation that followed were both largely unanticipated. We use these findings to provide revised estimates of the ex ante real rate.

Evans, William N.

TI The Determinants of Pesticide Regulation: A Statistical Analysis of EPA Decision-Making. **AU** Cropper, Maureen L.; Evans, William N.; Berardi, Stephen J.; Ducla-Soares, Maria M.; Portney, Paul R.

PD January 1991. **TI** Living by the "Golden Rule": Multimarket Contact in the U.S. Airline Industry. **AU** Evans, William N.; Kessides, Ioannis N. **AA** Evans: University of Maryland, College Park. Kessides: The World Bank. **SR** University of Maryland Department of Economics Working Paper Series: 91-3; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 25. **PR** no charge. **JE** L93, L11, L22, L41. **KW** Airline Industry. Market Structure. Industrial Organization. Competition.

AB A large portion of empirical work in industrial organization has been concerned with how intra-market conditions, such as market structure, affect performance. However, a growing number of authors have been concerned with how inter-market linkages might also affect market outcomes. Some suggest that single-product firms which meet each other in a number of different markets may refrain from vigorous competition in one market for fear of retaliation in another of their jointly contested markets. The theory is typically referred to as multi-market conduct or mutual forbearance. In a recent article, Bernheim and Whinston (1990) specify the conditions that must be present for multi-market contacts to enhance the collusive outcome. In this paper, we test for the effects of multi-market contacts on price in the U.S. airline industry. Our analysis of the inter-route variation in price for the 1000 large routes for the fourth quarter of 1988 suggests that prices in routes where the players have extensive contact outside the route are substantially higher than similar routes with a lower degree of multi-market contact.

PD March 1991. **TI** Measuring Peer Group Effects: A Study of Teenage Pregnancy. **AU** Evans, William N.; Oates, Wallace E.; Schwab, Robert M. **AA** University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-7; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 35. **PR** no charge. **JE** J13. **KW** Teenage Pregnancy. Peer Group. Children.

AB In this paper we use data from the National Longitudinal Study of Youth to explore the importance of peer group influence in the teenage pregnancy problem. We estimate a standard single equation model that treats the peer group as an exogenous variable as well as an expanded simultaneous equation model in which the peer group is an endogenous variable, determined in part by household choice. We find that single equation and simultaneous equation models yield very different pictures of the importance of peer group effects. In the standard model, we find a moderate and statistically significant peer group effect. In the expanded model, this effect disappears completely. Our results on school dropouts follow a very similar pattern.

PD May 1991. **TI** Wealth Effects and the Value of Health.

AU Evans, William N.; Viscusi, W. Kip. **AA** Evans: University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-15; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 27. **PR** no charge. **JE** D12, D31, J17, I18. **KW** Value of Life. Health Care. Injury Risk. Wealth Distribution. Consumer Economics.

AB Individuals differ in their attitudes towards health risks just as their preferences for other goods differ. This heterogeneity has two principal implications for public policy decisions affecting risks to life and health. First, the appropriate values of life and health will vary with the characteristics of the population at risk. Second, much of the heterogeneity in risk preferences is systemic. The primary concern in the economic literature has been with variations due to differences in wealth. The empirical evidence we have on the strength and direction of this wealth effect is suggestive, but not definitive. Researchers have found a weak, but significant, negative relationship between industry job risks and worker wealth. Estimated income elasticities of demand for health insurance are positive. More affluent individuals are more likely to undertake other investments that enhance their health, such as exercise. In a previous paper, we also found that the income elasticity of a consumer's marginal willingness to pay for a reduction of a risk of injury was about one. In this paper we will extend our earlier analysis of the heterogeneity in risk preferences by using data on nonfatal consumer injuries.

Fafchamps, M.

TI Structural Adjustment and the Peasantry in Morocco: A Computable Household Model Approach. **AU** de Janvry, Alain; Fafchamps, M.; Raki, M.; Sadoulet, E.

TI Peasant Household Behavior with Missing Markets: Some Paradoxes Explained. **AU** de Janvry, Alain; Fafchamps, M.; Sadoulet, E.

Faini, Riccardo

PD December 1990. **TI** The Fallacy of Composition Argument: Does Demand Matter for LDC Manufactured Exports?. **AU** Faini, Riccardo; Clavijo, Fernando.; Senhadji-Semlali, Abdel. **AA** Faini: Facolta di Economia e Commercio, Universita di Brescia. Clavijo: The World Bank. Senhadji-Semlali: The World Bank. **SR** CEPR Discussion Paper: 499; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 37. **PR** Pounds 3.00 or $5.00. **JE** 410, 130. **KW** Export Demand and Supply. Price Elasticities. Devaluation.

AB The constraints imposed upon the growth of LDC exports by international demand have been the subject of a long-standing controversy. In this paper we present estimates of manufactures export-demand functions for 23 LDCs. We focus first on the constraints that the international environment imposes upon export growth for an individual LDC. We assess the claim that supply factors play a dominant role in affecting export performances by testing the 'small-country hypothesis' of an infinitely elastic demand. We turn next to the constraints on global export growth and ask whether exports from LDCs compete mostly with Northern products, or are instead substitutes for exports from other LDCs. This allows us to assess the empirical validity of Cline's 1982 claim that a generalized outward shift in the LDCs' export-supply schedule would be associated with a significant decline in prices and would undermine the success of a widespread export-led strategy. We find that for a representative LDC a large share almost 80% of the benefits of devaluation on export revenues vanish when other LDC competitors pursue similar policies.

Fama, Eugene F.

PD November 1985. **TI** Term Premiums and Default Premiums in Money Markets. **AA** University of California, Los Angeles and University of Chicago. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 1-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 26. **PR** $2.00; checks payable to U.C. Regents. **JE** E43, E44. **KW** Money Market. Term Structure. Securities. Interest Rates.

AB There are time varying term and default premiums in the expected returns on money market securities. Default premiums decline with maturity and tend to be higher during recessions. Term premiums decline with maturity and tend to be higher during good times, but humps and inversions in the term structure of expected returns are common during recessions. Treasury bills produce positive average term premiums for the overall sample, but average term premiums for private issuer securities are close to 0.0. A general conclusion is that variation in forward rates is primarily variation in current expected returns rather than in forecasts of changes in interest rates.

PD February 1986. **TI** Commodity Futures Prices: Some Evidence on Forecast Power, Premiums, and the Theory of Storage. **AU** Fama, Eugene F.; French, Kenneth R. **AA** Fama: University of California, Los Angeles and University of Chicago. French: University of Chicago. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 5-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 23. **PR** $2.00; checks payable to U.C. Regents. **JE** G13, G12, E22. **KW** Futures Market. Inventories. Stock Market. Asset Pricing.

AB There are two popular views of commodity futures prices. The theory of storage of Kaldor (1939), Working (1948), Brennan (1958), and Telser (1958) explains the difference between contemporaneous spot and futures prices in terms of interest foregone in storing a commodity, warehousing costs, and a convenience yield on inventory. The alternative view splits a futures price into an expected risk premium and a forecast of a future spot price. The theory of storage is not controversial. In contrast, there is little agreement on whether futures prices contain expected premiums or have power to forecast spot prices. We use both models to study the behavior of futures prices for 21 commodities. We find that more powerful statistical tests make the response of futures prices to storage cost variables easier to detect than evidence that futures prices contain premiums or power to forecast spot prices.

PD July 1986. **TI** Permanent and Temporary Components of Stock Prices. **AU** Fama, Eugene F.; French, Kenneth R. **AA** Fama: University of California, Los Angeles. French: University of Chicago. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 29-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 32. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G14. **KW** Stock Prices. Stock Market. Asset Pricing.

AB The level of a stationary variable is temporary in the sense that the variable tends to return to its mean. Mean reversion implies that changes in the variable are predictable on the basis of past changes. We use simple methods, based on the properties of long differences of a stationary series, to test for stationary (temporary) components in stock prices. We find that stock prices have stationary components. These temporary price components account for small fractions of variance for the short return horizons common in empirical work. We estimate, however, that temporary price components account for 25 to 45 percent of the variances of 3 to 5 year returns for the 1926-85 period. In other words, 25 to 45 percent of the variation of these longer-horizon returns is predictable from past returns. Our results add to mounting evidence that stock returns are predictable.

PD October 1986. **TI** The Information in Long-Maturity Forward Rates. **AU** Fama, Eugene F.; Bliss, Robert R. **AA** Fama: University of California, Los Angeles. Bliss: University of Chicago. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 28-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 23. **PR** $2.00; checks payable to U.C. Regents. **JE** E43. **KW** Interest Rates. Term Structure. Forward Rates.
AB Much of the empirical work on the term structure of interest rates is concerned with two questions. (a) Do current forward rates forecast future interest rates? (b) Do current forward rates have information about the structure of current expected returns on bonds with different maturities? Most of the empirical work on these questions uses U.S. Treasury bills and so is restricted to maturities less than a year. This paper studies the information in forward rates about future interest rates and current expected returns for annual U.S. Treasury maturities to 5 years.

PD October 1986. **TI** Business Cycles and the Behavior of Metals Prices. **AU** Fama, Eugene F.; French, Kenneth R. **AA** Fama: University of California, Los Angeles and University of Chicago. French: University of Chicago. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 31-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 22. **PR** $2.00; checks payable to U.C. Regents. **JE** E32, G13, E22. **KW** Inventory. Futures Pricing. Commodities. Business Cycle.
AB The theory of storage of Brennan (1958), Telser (1958), and Working (1949) is the dominant model of commodity forward and futures prices. Following Brennan and Telser, many tests of the theory use inventory data to test the hypothesis that the marginal convenience yield on inventory falls at a decreasing rate as aggregate inventory increases. Inventory data are always a problem in this approach. It is usually unclear how aggregate inventory should be defined. For example, how should one treat government stocks? Moreover, like the metals we study, many commodities are produced, consumed, and traded internationally, and the accuracy of aggregate inventory data is questionable. Our tests of the theory of storage on metals are also based on the hypothesis that the marginal convenience yield declines at higher inventory levels but at a decreasing rate. However, rather than test the hypothesis by examining the inventory-convenience yield relation directly, we test some of its implications about the relative variation of spot and futures prices.

PD October 1986. **TI** Common Factors in the Serial Correlation of Stock Returns. **AU** Fama, Eugene F.; French, Kenneth R. **AA** Fama: University of California, Los Angeles. French: University of Chicago. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 30-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 38. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G11, G14. **KW** Stock Returns. Stock Market. Portfolio Choice.
AB Evidence that expected stock returns vary through time is plentiful. The common conclusion, usually from tests on monthly data, is that stock returns are predictable, but the implied time variation of expected returns is a small fraction (usually less than 5%) of return variance. Fama and French (1986) find negative serial correlation in stock returns that becomes stronger for return horizons beyond a year and that implies stronger predictability of long horizon returns. Our goal is to test whether the negative serial correlation of long horizon returns, and the substantial time variation of expected returns it implies, can be attributed to one or more common factors in returns.

PD November 1987. **TI** Dividend Yields and Expected Stock Returns. **AU** Fama, Eugene F.; French, Kenneth R. **AA** University of Chicago. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 3-88; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 30. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G11, G14. **KW** Stock Market. Portfolio Choice. Stock Returns.
AB There is much evidence that stock returns are predictable. The common conclusion, usual from tests on monthly data, is that the predictable component of returns, or equivalently, the variation through time of expected returns, is a small fraction (usually less than 3%) of return variances. Using variance-ratio tests, Poterba and Summers (1987) also estimate that long horizon stock returns have large predictable components. Univariate tests on long horizon returns are imprecise. Although their point estimates suggest strong predictability, Poterba and Summers (1987) cannot reject the hypothesis that stock prices are random walks, even with variance ratios estimated on returns from 1871 to 1985.

PD December 1987. **TI** Forecasting Returns on Corporate Bonds and Common Stocks. **AU** Fama, Eugene F.; French, Kenneth R. **AA** University of Chicago. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 4-88; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 26. **PR** $2.00; checks payable to U.C. Regents. **JE** G12. **KW** Stock Market. Securities. Corporate Bonds.
AB Evidence that expected stock returns vary through time is plentiful, for example, Fama and Schwert (1977), Fama (1981), Keim and Stambaugh (1986), and French, Schwert, and Stambaugh (1987). The common conclusion, usually from monthly data, is that the predictable component of returns is a small part (less than 3%) of return variances. Evidence that expected bond returns vary through time is also plentiful, for example, Fama (1976, 1984, 1986), Shiller, Campbell, and Schoenholtz (1983), Keim and Stambaugh (1986), and Fama

and Bliss (1987). This previous work is largely limited to U.S. Treasury securities, maturities less than 5 years, and return horizons (holding periods) of 1 year or less. We extend the evidence on time varying expected returns to long-term corporate bonds and longer return horizons.

PD January 1988. **TI** Term Structure Forecasts of Interest Rates, Inflation, and Real Returns. **AA** University of Chicago. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 5-88; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 26. **PR** $2.00; checks payable to U.C. Regents. **JE** E43, E31, G13. **KW** Interest Rate. Inflation. Securities.

AB A recurring issue in the literature on the term structure of interest rates is the extent to which the current term structure of yields or forward rates can be used to forecast future short-term or "spot" interest rates. For the most part, the evidence is negative. For example, Hamburger and Platt (1975) and Shiller, Campbell, and Schoenholtz (1983) conclude that forward rates have no power to forecast future spot rates. Fama (1984) finds that short-term forward rates forecast 1-month interest rates 1 or 2 months ahead, but forecast power varies through time and is typically weak. Like any interest rate, the 1-year spot rate on Treasury bonds can be split into an expected real return and an expected inflation rate. The mean-reverting tendency of the spot rate suggest that its components are mean-reverting -- a hypothesis with strong economic appeal. Moreover, the power of forward rates to forecast 1-year inflation rates, future real returns on 1-year bonds, or both. These are the main issues of this paper.

Fan, Shenggen

PD May 1991. **TI** Induced Technical Change in Centrally Planned Economies. **AU** Fan, Shenggen; Ruttan, Vernon W. **AA** Fan: International Service for National Agricultural Research, Netherlands. Ruttan: University of Minnesota. **SR** University of Minnesota Economic Development Center Bulletin: 91-3; Department of Agricultural and Applied Economics, 231 Classroom Office Building, University of Minnesota, St. Paul, MN 55108. **PG** 20. **PR** free. **JE** P24, P21, O11, O33. **KW** Technological Change. Centrally Planned Economy. Economic Growth. Economic Development.

AB It has generally been assumed that the inferences of the induced technical change model with respect to the direction of technical change could not be expected to hold for the centrally planned economies. In this paper we test three hypotheses generated from the induced technical change hypotheses against the experience of centrally planned economies: (a) if land becomes increasingly scarce new technology will be biased in a land-saving direction; (b) if labor becomes increasingly scarce new technology will be biased in a labor saving direction; and (c) changes in the land-labor ratio have been induced by changes in relative factor endowments. The results suggest a bias toward mechanical and against biological technology regardless of factor endowments. This is consistent with the well known ideological or policy bias in a number of centrally planned economies toward a capital intensive development strategy.

Farmer, Roger E. A.

TI The Aggregate Effects of Monetary Externalities. **AU** Benhabib, Jess; Farmer, Roger E. A.

Fershtman, Chaim

PD April 1991. **TI** Integral Games: Theory and Applications. **AU** Fershtman, Chaim; Kamien, Morton I.; Muller, Eitan. **AA** Fershtman and Muller: Tel Aviv University. Kamien: Northwestern University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 16-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 24. **PR** no charge. **JE** C73. **KW** Game Theory. Dynamic Game. Integral Games.

AB The paper extends the framework of differential games and introduces and discusses a class of dynamic games which is denoted as integral games. In this class of games the evolution of the state variables are given by nondegenerate integral equations. The framework is thus capable of modeling a problem in which the whole history affects the changes of the state variables.

Fetini, Habib

TI Development Strategies and the Environment. **AU** Adelman, Irma; Fetini, Habib.

Finkelshtain, Israel

PD October 1990. **TI** Marketed Surplus under Risk: Do Peasants Agree with Sandmo? **AU** Finkelshtain, Israel; Chalfant, James A. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 562; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 26. **PR** $5.20. **JE** Q12, D81. **KW** Peasant Households. Risk Aversion. Production.

AB Using a newly defined notion of aversion to income risk, the behavior of the marketed-surplus producer under price risk is characterized. Unlike the familiar case first examined by Sandmo, output depends on both ordinal preferences for goods and on risk attitudes. Conditions are found that yield an output level under risk that is smaller than under certainty. If these conditions do not hold, both risk and risk aversion may have a positive effect on output. Implications for econometric studies of risk attitudes are considered and illustrated with an example. Finally, we examine the effect of uncertainty on the peasant's long-run equilibrium.

PD January 1991. **TI** Aversion to Income Risk in the Presence of Multivariate Risk. **AU** Finkelshtain, Israel; Chalfant, James A. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 583; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 20. **PR** $5.00. **JE** D11, D81. **KW** Risk Aversion. Preferences. Income.

AB We define a risk premium that captures aversion to income risk in the presence of other random attributes in the utility function and use it to construct a new matrix measure of aversion to income risk. Unlike univariate or other multivariate measures, the new measure permits the analysis of decisions that involve a subset of all risks faced by an individual. The restrictions on preferences needed for comparative risk aversion are identified and provide new insight into the relationship between risk attitudes and ordinal preferences.

Fisher, Anthony C.

PD January 1991. **TI** On the Existence and Optimality of Competitive Equilibria in Nonrenewable Resource Industries. **AU** Fisher, Anthony C.; Karp, Larry S. **AA** University of California at Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 574; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 13. **PR** $5.00. **JE** Q31, D41. **KW** Nonrenewable Resources. Extraction Costs. Competitive Equilibrium.

AB We reconsider the problem of inefficiency and nonexistence of a competitive equilibrium in nonrenewable resource markets where extraction costs are nonconvex. The existence of a backstop technology (which induces a flat portion of the industry demand curve) restores both existence and efficiency, provided that the backstop price is sufficiently low. If firms face even a small amount of uncertainty regarding their rivals' stocks, a backstop technology is sufficient to restore existence of competitive equilibrium even if the backstop price is very high. In this case, however, the competitive equilibrium is not efficient.

PD January 1991. **TI** Valuation of Tropical Forests. **AU** Fisher, Anthony C.; Hanemann, W. Michael. **AA** University of California at Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 576; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 39. **PR** $7.80. **JE** O57, Q32, O13. **KW** Nonrenewable Resources. Deforestation. Developing Countries.

AB As noted in the WIDER program on the environment and development, specifically in the section on this paper, tropical forests provide a wide variety of services to humankind. Yet, as documented in countless books, articles, and other media presentations, the forests are under threat. Repetto (1988, pp. 2-15) observes that, since World War II, deforestation has shifted from temperate to tropical forests and that, in most developing countries today, deforestation is accelerating. Table 1 shows that, 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 purpose of this paper is to help in redressing the balance by providing a framework for a more complete valuation of tropical forests.

Forsythe, Robert

PD March 1991. **TI** An Experimental Study of Voting Rules and Polls in Three-Way Elections. **AU** Forsythe, Robert; Myerson, Roger E.; Rietz, Thomas; Weber, Robert. **AA** Forsythe: University of Iowa. Myerson, Rietz and Weber: Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 927; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 26. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** D71, D72, C91, C92. **KW** Experimental Economics. Voting Systems. Social Choice. Game Theory. Approval Voting. Voting. Polls.

AB We apply induced value theory to groups of voters to create electorates with known, ordinal preferences over candidates in three-way elections. We ask whether game-theoretic equilibria appear to arise and study how three voting rules and the presence or lack of non-binding, pre-election polls affect individual behavior and election outcomes. We find that Condorcet losers occasionally win regardless of the voting rule or presence of polls. Duverger's law appears to hold under plurality voting while close, three-way races usually arise under approval voting and Borda rule. Polls do not appear to affect these results and are poor predictors of election outcomes under approval voting and Borda rule. However, polls perform better under plurality voting and may serve as an equilibrium selection signal. Though they do so more often under plurality voting, voters generally do not cast votes that match their poll responses. However, they usually cast votes that are consistent with some equilibrium and, by the end of a series of elections, most voters cast votes that are consistent with a single equilibrium (though that equilibrium varies by group and rule).

Foster, William E.

PD July 1990. **TI** Price-Distorting Compensation Serving the Public Interest. **AU** Foster, William E.; Rausser, Gordon C. **AA** Foster: North Carolina State University. Rausser: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 567; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 19. **PR** $5.00. **JE** D72, D78. **KW** Economic Policy. Political Economy. Public Policy.

AB Henry Aaron, in his Richard T. Ely lecture, characterized the tasks for public policy economists as the identification of "...policy rules that are robust and are important not only economically but, in a fundamental sense, politically (p. 13)." Most public policy analysts have a clear perspective of economic robustness, but few attempts have been made to articulate a motion of political robustness. In general, economic robustness focuses on designing policies that will, when put into practice, serve the public interest. Operationally the public interest can and has been derived in numerous ways (Steiner). Similarly, many characterizations of political robustness can also be advanced.

PD August 1990. **TI** Mobility, Diversification, and Compensation in Trade Reform. **AU** Foster, William E.; Gray, Richard; Rausser, Gordon C. **AA** Foster: North Carolina State University, Raleigh. Gray and Rausser: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 550; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 27. **PR** $5.40. **JE** F13, D72. **KW** Trade Reform. Free Trade. Protectionism.

AB For a small country, trade reform represents a potential Pareto improvement. Protectionist, price-distorting policies are widely criticized from a standpoint of economic efficiency and nondistorting policies are widely supported. Despite the espoused benefits of free trade, trade protection exists in most, if not all, countries of the world. In an attempt to explain these policies, numerous political-economic models of rent seeking have been introduced [e.g., Krueger (1974), Becker (1983)].

This paper utilizes an alternative political-economic model where trade liberalization may harm some groups. Such groups are in a strong position to block moves from the status quo.

TI Public Goods and Wealth Transfer Tradeoffs. **AU** Rausser, Gordon C.; Foster, William E.

PD October 1990. **TI** Farmer Behavior under Risk of Failure. **AU** Foster, William E.; Rausser, Gordon C. **AA** Foster: North Carolina State University. Rausser: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 488Rev; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 33. **PR** $6.60. **JE** Q12, Q11, Q14. **KW** Agriculture. Farms. Farm Household.
AB This article addresses input decisions under risk of farm failure. Without risk of failure, the farmer would first maximize his expected utility as if he relied only on farm revenue (including concurrent off-farm employment, if applicable), and then compare this level of farm-derived utility with the utility available elsewhere (less moving expenses, etc.). If the farm-derived expected utility exceeds non-farm utility the farmer remains a farmer. With risk of failure, however, if the farmer chooses to continue another season, the ensuing revenues may be so low as to preclude future decisions to stay in agriculture (i.e., failure). The critical level of revenue below which the farm fails may be a function of household-maintenance expenditures, farm debt, and so forth. This level is likely to rise with farm size, but at a decreasing rate. Therefore, smaller scale, commercial farms are more likely to be at risk than larger farms.

PD October 1990. **TI** Coalition Breaking and Policy Reform. **AU** Foster, William E.; Rausser, Gordon C. **AA** Foster: North Carolina State University. Rausser: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 560; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 30. **PR** $6.00. **JE** D78, D63, E61, D62. **KW** Economic Policy. Public Policy. Public Interest. Policy Coordination.
AB Most public policy analysts have a clear perspective of economic robustness, but few attempts have been made to articulate a notion of political robustness. In general, economic robustness focuses on designing policies that will, when put into practice, serve the public interest. Operationally, the public interest can and has been defined in numerous ways (Steiner 1969). Similarly, many characterizations of political robustness can also be advanced. Some policies that are in the public interest harm members of special interest groups. As a result, compensation schemes may be needed to make the pursuit of public interest politically robust. In this context, it is important to distinguish between public-interest-serving policies and compensation schemes. The combination of the two types of policies, public-interest and compensation policies, arise in many well-known circumstances: the mix of agricultural policies, privatization, urban planning and the supply of local public goods, policy reforms of all types, the release and dissemination of technical innovations, and so on.

French, Kenneth R.

TI Commodity Futures Prices: Some Evidence on Forecast Power, Premiums, and the Theory of Storage. **AU** Fama, Eugene F.; French, Kenneth R.

TI Permanent and Temporary Components of Stock Prices. **AU** Fama, Eugene F.; French, Kenneth R.

TI Business Cycles and the Behavior of Metals Prices. **AU** Fama, Eugene F.; French, Kenneth R.

TI Common Factors in the Serial Correlation of Stock Returns. **AU** Fama, Eugene F.; French, Kenneth R.

TI Dividend Yields and Expected Stock Returns. **AU** Fama, Eugene F.; French, Kenneth R.

TI Forecasting Returns on Corporate Bonds and Common Stocks. **AU** Fama, Eugene F.; French, Kenneth R.

Friedman, Daniel

TI The Effect of Sequential Information Arrival on Prices: An Experimental Study. **AU** Copeland, Thomas E.; Friedman, Daniel.

TI The Market Value of Information: Some Experimental Results. **AU** Copeland, Thomas E.; Friedman, Daniel.

Frydman, Roman

PD October 1990. **TI** The Ownership-Control Structure and the Behavior of Polish Enterprises during the 1990 Reforms: Macroeconomic Measures and Microeconomic Response. **AU** Frydman, Roman; Wellisz, Stanislaw. **AA** Frydman: New York University. Wellisz: Columbia University. **SR** Columbia Department of Economics Working Paper: 504; Department of Economics, Columbia University, New York, New York 10027. **PG** 27. **PR** $5.00. **JE** P22, P21, O52, P27. **KW** Poland. Economic Reform. Socialism. Inflation.
AB This paper analyzes the behavior of the Polish Socialized sector during the first seven months of the reform program launched by the government in January, 1990. The principal purpose of the January 1 reforms was to fight hyperinflation. Optimists also hoped that financial discipline and demand constraint would induce enterprises to rationalize pricing, production and employment. They also hoped that market pressures would drive the least efficient enterprises into bankruptcy. On the other hand pessimists feared that managers, following the "cost plus" principle would raise prices in response to the costs, and, if demand proved insufficient, they would simply slash production. There was also much skepticism about bankruptcy. Given the tightly knit network of exclusive suppliers and subcontractors and exclusive customers, the financially strong firms, it was argued, would prop up the financially weak ones, lest bankruptcies produce a chain reaction.

Fudenberg, Drew

PD June 1991. **TI** Self-Confirming Equilibrium. **AU** Fudenberg, Drew; Levine, David K. **AA** Fudenberg: Massachusetts Institute of Technology. Levine: University of California, Los Angeles. **SR** Massachusetts Institute of Technology Department of Economics Working Paper: 581; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 35. **PR** $6.00 Domestic, $8.00 Overseas, $2.00 Student. **JE** C72, C70. **KW** Nash Equilibrium. Game Theory. Correlated Equilibrium.

AB Self-confirming equilibrium differs from Nash equilibrium in allowing players to have incorrect beliefs about how their opponents would play off of the equilibrium path. We provide several examples of ways that self-confirming and Nash equilibria differ. In games with "identified deviators," all self-confirming equilibrium outcomes can be generated by extensive-form correlated equilibria. In two-player games, self-confirming equilibria with "unitary beliefs" are Nash.

Galai, Dan

TI Economic Evaluation of Remuneration from Patents and Technology Transfer. **AU** Ilan, Yale; Galai, Dan.

Gale, William G.

PD May 1991. **TI** Intergenerational Transfers and the Accumulation of Wealth. **AU** Gale, William G.; Scholz, John Karl. **AA** Gale: University of California, Los Angeles. Scholz: University of Wisconsin, Madison. **SR** University of California at Los Angeles Department of Economics Working Paper: 624; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 26. **PR** $2.50; checks payable to U.C. Regents. **JE** D12, D31, D91. **KW** Intergenerational Transfers. Saving. Bequests.

AB This paper provides evidence on the role of intergenerational transfers in the accumulation of net worth and on differences in transfers between blacks and whites. To address these issues, we use the 1983-86 Survey of Consumer Finances, which contains detailed information on households' gifts to and from other households, trusts, life insurance, and net worth. Unlike previous analyses, we distinguish between intended transfers (for example, gifts to other households) and possibly unintended transfers (bequests). In calculations similar to those of Kotlikoff and Summers (1981), we estimate that intended transfers account for at least 20% of net worth, and possibly substantially more. Thus, a significant portion of wealth accumulation cannot be explained by life cycle motives. Previous analyses cannot make this claim because they focus on bequests, which are consistent with either life cycle saving or bequest motives.

Gallini, Nancy T.

PD March 1991. **TI** Dual Distribution in Franchising. **AU** Gallini, Nancy T.; Lutz, Nancy A. **AA** Gallini: University of Toronto. Lutz: Yale University. **SR** Yale Cowles Foundation Discussion Paper: 973; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 27. **PR** $2.00. **JE** L11, L14, L52. **KW** Franchises. Corporations. Marketing. Private Information.

AB In this paper we offer an explanation for the practice of dual distribution, the simultaneous use of franchises and company owned outlets for distributing new products. Our explanation rests on the observation that franchisors often acquire private information, not available to franchisees, on product demand through marketing efforts. Under this assumption of asymmetric information, we show that a franchisor will use both direct ownership as well as the franchise contract to convey information about a new product. This explanation for dual distribution relies neither on capital market imperfections nor upon location-specific factors, in contrast to alternative explanations advanced in the literature. Testable implications of the signaling model are discussed.

Galor, Oded

PD January 1991. **TI** Terms of Trade, Interest Rates and Current Account Dynamics. **AU** Galor, Oded; Lin, Shoukang. **AA** Galor: Brown University. Lin: University of California, Los Angeles. **SR** Brown University Department of Economics Working Paper: 91-5; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 35. **PR** not available. **JE** F32, F31, F41. **KW** Current Account. Overlapping Generations Model. Open Economy. Terms of Trade.

AB This paper suggests that the recent intertemporal studies concerning the implications of terms of trade deterioration for the current account of a small open economy, may suffer from critical methodological deficiencies. The paper analyzes the current account dynamics of a small open economy within a two-sector overlapping generations model in which the terms of trade and the world interest rate are endogenously determined. The study demonstrates the importance of the incorporation of: (i) the fundamental changes in the world economy, that brought about the terms-of-trade deterioration, and (ii) the relationship between the terms of trade and the world interest rate.

Gaudry, Marc J. I.

PD July 1991. **TI** Three Families of Mode Choice Models Applied to Intercity Travel Demand with Aggregate Canadian Data. **AA** Universite de Montreal. **SR** Queen's John Deutsch Institute Discussion Paper: 13; c/o Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 27. **PR** $3.00 Canada and U.S.; $3.50 Foreign. **JE** R41. **KW** Transportation Demand. Transportation System.

AB In this paper, we consider five types of mode choice models, all of which contain the linear logit as an embedded special case. The model types belong to the Box-Cox logit, dogit and inverse power transformation families. We focus on particular features of the probabilistic response curve that can make a difference in the evaluation of changed transport conditions, such as fares or speeds. We find, with a sample of four intercity passenger modes for 120 Canadian city pairs in 1976, evidence of both modal captivity and asymmetric response that would make a difference to the evaluation of significant service improvements. From a modeling point of view, the linear logit form is easily rejected in favor of any of the five types of generalizations explored.

Gautschi, David A.

TI The Outputs of Retail Activities: French Evidence. **AU** Betancourt, Roger R.; Gautschi, David A.

Gavin, Michael

PD February 1991. **TI** Economic Policy, Exchange Rates and Investment in Keynesian Economy. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 519; Department of Economics, Columbia University, New York, New York 10027. **PG** 34. **PR** $5.00. **JE** F11, F21, F41, E22, E63. **KW** Investment. Fiscal Policy. Monetary Policy. Macroeconomic Model. Open Economy.

AB This paper embeds in an otherwise conventional macroeconomic model the assumption of rational investment decisions, in a world in which investment goods can be imported. Expansionary monetary policy will lead to a reduction in domestic investment if (i) the share of imports in

total investment expenditure is high enough and (ii) Keynesian, nominal price rigidities vanish slowly enough. Expansionary fiscal policy tends to "crowd in" domestic investment.

PD March 1991. **TI** Animal Spirits, Terms of Trade and the Current Account: The Role of Financial Market Integration. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 527; Department of Economics, Columbia University, New York, New York 10027. **PG** 29. **PR** $5.00. **JE** F21, F32, F15, F41. **KW** International Investment. Current Account. Exchange Rate. Economic Integration.
AB During the first half of the 1980's the United States experienced an equity and property market boom, a dramatic improvement in the international terms of trade, and a substantial move into current account deficit. Few observers imagine that these three events were unrelated, though their ultimate origin and the economic mechanism linking them remain controversial. One prominent, though controversial, explanation is that all three major developments were the consequence of a portfolio disturbance - specifically an increase in the relative desirability of United States assets as stores of wealth. This hypothesis leaves at least one important question unanswered: if the fundamental disturbance in the world economy was a sudden emergence of excess demand for U.S. assets, why did anything have to change except the price of those assets? Why did the disturbance spill over into goods markets at all?.

PD May 1991. **TI** Terms of Trade, the Trade Balance, and Stability: The Role of Savings Behavior. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Papers: 397; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 28. **PR** no charge. **JE** F11, F32, F41. **KW** Savings. Trade Balance. Open Economy. Terms of Trade.
AB In conventional models of the open economy, the impact on the trade balance of a change in the terms of trade depends upon whether the Marshall-Lerner condition on demand elasticities is satisfied. This paper shows that, in a model which incorporates rational savings behavior, the link between the Marshall-Lerner condition and stability may survive intact or may be severed, depending upon the precise formulation of savings behavior.

Gerson, Jos

PD May 1991. **TI** Determinants of Corporate Ownership and Control in South Africa. **AU** Gerson, Jos; Barr, Graham. **AA** Gerson: University of California, Los Angeles and University of Cape Town. Barr: University of Cape Town. **SR** University of California at Los Angeles Department of Economics Working Paper: 620S; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 25. **PR** $2.50; checks payable to U.C. Regents. **JE** O55, G32. **KW** South Africa. Corporations. Corporate Structure.
AB This paper attempts to identify the determinants of the structure of corporate ownership and control in South Africa. Methodologically, it takes its cue from the seminal study on U.S. corporate data by Demsetz & Lehn (1985). Given that the South Africa structure with its pervasive use of pyramided holding companies and crossholdings differs radically from the U.S., certain novel insights were obtained. Whereas almost all the companies in the sample were majority-controlled, the effective percentage shareholding of the dominant shareholder group in each company varied dramatically and systematically. This paper sought to explain that variation.

Geske, Robert

PD November 1986. **TI** Controlling Interest Rate Risk and Return with Futures. **AU** Geske, Robert; Pieptea, Dan R. **AA** Geske: University of California, Los Angeles. Pieptea: University of Texas. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 32-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 26. **PR** $2.00; checks payable to U.C. Regents. **JE** E43, G13. **KW** Interest Rate. Futures. Market. Hedging. Uncertainty.
AB Dramatic increases in interest rate levels and volatility since the early 1970's have motivated the creation of hedging instruments and immunization models. The creation of interest rate futures markets has enriched the hedging opportunities of participants in the debt instruments markets. The hedger's objective is the optimal control of inherent risk due to adverse interest rates changes. The hedger's problem is straightforward: a methodological choice of the hedging instruments and the optimal hedge ratio. In this paper methods using interest rates futures for controlling risk and return are proposed and demonstrated empirically.

Gilboa, Itzhak

PD June 1990. **TI** Global Games. **AU** Gilboa, Itzhak; Lehrer, Ehud. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 922; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 28. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** C71. **KW** Cooperative Games. Shapley Value. Partitions. Core.
AB Global games are real-valued functions defined on partitions (rather than subsets) of the set of players. They capture "public good" aspects of cooperation, i.e., situations where the payoff is naturally defined for all players ("the globe") together, as is the case with issues of environmental clean-up, medical research, and so forth. We analyze the more general concept of lattice functions and apply it to partition functions, set functions and the interrelation between the two. We then use this analysis to define and characterize the Shapley value and the core of global games.

PD October 1990. **TI** Philosophical Applications of Kolmogorov's Complexity Measure. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 923; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 33. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** A12, C44. **KW** Kolmogorov Complexity. Occam's Razor. Impossibility Theorem. Decision Theory.
AB Kolmogorov has defined the complexity of a sequence of bits to be the minimal size of (the description of) a Turing machine which can regenerate the given sequence. This paper contains two notes on possible applications of this complexity

notion to philosophy in general and the philosophy of science in particular. The first presents simplicism -- a theory prescribing that people would tend to choose the simplest theory to explain observations, where "simple" is defined by (a version of) Kolmogorov's measure. The second suggests a reinterpretation of a simple observation, saying that reality is almost surely too complex to understand, terms such as "good" and "evil" almost surely too complex to define, and so forth.

PD February 1991. **TI** Updating Ambiguous Beliefs. **AU** Gilboa, Itzhak; Schmeidler, David. **AA** Gilboa: Northwestern University. Schmeidler: Ohio State University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 924; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 25. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** C11, D81, D83, C44. **KW** Bayesian Analysis. Statistics. Probability Theory.

AB We present and axiomatize several update rules for probabilities (and preferences) where there is no unique additive prior. In the context of non-additive probabilities we define and axiomatize Bayesian update rules; in the context of multiple (additive) priors we define maximum likelihood rules. It turns out that for decision-makers which can be described by both theories, the two approaches coincide. Thus, we suggest a pseudo-Bayesian foundation to classical statistics, which may also motivate alternative statistical inference techniques, and provide an axiomatically-based ambiguous beliefs update rule, which is needed for their application in many economic theory models.

PD July 1991. **TI** Rationality and Ascriptive Science. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 943; Northwestern University, 2001 Sheridan Road, Evanston, IL 60208-2014. **PG** 31. **PR** $3.00 in the U.S. or Canada; $5.00 via international mail. **JE** C70, D83, D80. **KW** Rationality. Common Knowledge. Impossibility Theorem.

AB This paper suggests definitions for two closely related terms which are (or could be) used in the social sciences. First, "rationality" is defined as a behavior which will not be altered as a result of awareness to its analysis. Next, an "ascriptive theory" is defined to be a descriptive theory which may become common knowledge among its subjects, yet remain valid. The relation between these concepts -- as well as between them and others -- is studied, and an "impossibility theorem," due to Dostoyevsky, is discussed.

TI Linear Measures, the Gini Index and the Income-Equality Tradeoff. **AU** Ben Porath, Elchanan; Gilboa, Itzhak.

Giovannini, Alberto

PD May 1991. **TI** Currency Substitution and the Fluctuations of Foreign-Exchange Reserves with Credibly Fixed Exchange Rates. **AA** Giovannini: Columbia University Business School. **SR** CEPR Discussion Paper: 535; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 35. **PR** Pounds 3.00 or $5.00. **JE** 431, 432. **KW** Currency Substitutions. Foreign Exchange Reserves. Money Demand. Fixed Exchange Rates.

AB A fixed-exchange-rate system is characterized by two pillars: monetary policy coordination and foreign exchange reserves. This paper concentrates on the fluctuation of foreign exchange reserves by taking monetary policy coordination as given: the sustainability of the fixed exchange rate regime is insured via a cointegration restriction on the path of money supplies. The paper considers three types of cash-in-advance models of money demand. The first two types are more traditional models where the cash-in-advance constraint is applied on the goods produced in the two countries. The third type is a model where cash is required in transactions with the government. The main finding is that when the exchange rate is credibly fixed, currencies are perfectly substitutable as stores of value although they might not be perfectly substitutable as transactions media. While the total demand for money is always determined, the composition of foreign exchange reserves might be indeterminate if currencies are held for store-of-value purposes only.

Glied, Sherry

TI Benefits and Costs of HIV Testing. **AU** Bloom, David E.; Glied, Sherry.

Golbe, Devra L.

PD 1990. **TI** Catch a Wave: The Time Series Behavior of Mergers. **AU** Golbe, Devra L.; White, Lawrence J. **AA** Golbe: City University of New York. White: New York University. **SR** New York University Salomon Brothers Center Working Paper: S-90-28; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 14. **PR** $5.00. **JE** G34, E32. **KW** Mergers. Takeovers. Business Cycle.

AB It has commonly been noted that U.S. mergers come in "waves." Casual empiricism, based on observation of the data on U.S. mergers, pictured in figure 1, suggests that this is the case. Scherer and Ross (1990. pp. 153-159) describe merger activity as "episodic, marked by four prominent waves -- one clustered around the turn of the century, one peaking in 1929, a third peaking in 1968, and a fourth ... during the early and mid-1980's." In this paper we offer the first direct and formal test of the hypothesis that the time series pattern of merger activity can be characterized by "waves.".

Gomulka, Stanislaw

PD January 1991. **TI** A New Method of Long-Run Growth Accounting with Application to the Soviet Economy 1991 and the U.S. Economy 1928-87. **AU** Gomulka, Stanislaw; Schaffer, Mark. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 14; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 36. **PR** no charge. **JE** O47, C82, P52. **KW** Growth Model. Economic Growth. Accounting.

AB In this paper we develop a new method of growth accounting and use it to analyze the long-term growth of the U.S. and the USSR. The technique is designed to capture the indirect or "feedback" contributions of technological change and labor input growth. These indirect contributions arise from the fact that in the medium- and long-term, technological progress and labor input growth raise the level of current output and thus, given the investment/output ratio, the growth rate of capital. The technique also avoids the problem of identifying the bias of technological progress faced by the standard short-

run method of growth accounting.

Goodman, Jack L., Jr

PD January 1991. **TI** The Characteristics of Home Mortgage Debt, 1970-89: Trends and Implications. **AU** Goodman, Jack L., Jr.; Hudson, Yana; Yermish, Scott. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 149; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 23. **PR** no charge. **JE** G21, R21, R31. **KW** Mortgages. Housing. Interest Rates. Urban Economics. Credit.

AB This paper develops a data base that yields: (1) improved estimates of the average level of interest rates on the entire stock of home mortgage debt during the past twenty years; (2) the first comprehensive estimates of the distribution of those interest rates; and (3) time series of other historical characteristics of home mortgage credit. Development of these time series estimates of mortgage characteristics opens up new research opportunities, and this paper presents two applications: (1) estimation of a time series of aggregate scheduled payments of principal and interest on home mortgage debt; and (2) specification and estimation of improved models of home mortgage originations.

Gordon, Roger H.

TI Taxes and the Choice of Organizational Form. **AU** MacKie-Mason, Jeffrey K.; Gordon, Roger H.

Gort, Michael

PD May 1991. **TI** Decomposing Technical Change. **AU** Gort, Michael; Bahk, Byong H.; Wall, Richard A. **AA** Gort: State University of New York, Buffalo. Bahk: Dong-A University, Korea. Wall: Canisius College. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 91-4; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 45. **PR** no charge. **JE** L60, G31, O33, L11, L52. **KW** Technological Change. Capital Productivity. Manufacturing. Business Investment.

AB A production function is specified with human capital as a separate argument and with embodied technical change proxied by a variable that measures the average vintage of the stock of capital. The coefficients of this production function are estimated with cross section data for roughly 2,150 new manufacturing plants in 41 industries, and for subsets of this sample. The question of interactions between new investment and initial endowments of capital is then examined with data for roughly 1,400 old plants in 15 industries.

Gray, Richard

TI Mobility, Diversification, and Compensation in Trade Reform. **AU** Foster, William E.; Gray, Richard; Rausser, Gordon C.

Green, David A.

PD May 1991. **TI** A Comparison of Estimation Approaches for the Union-Nonunion Wage Differential. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-13; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 60. **PR** not available. **JE** J51, J31. **KW** Unions. Wages. Wage Differentials.

AB Commonly used estimators of the union wage premium provide very different estimates. In this paper, I develop a complete version of a wage and sector determination model which nests the common estimators (the longitudinal estimator, the estimator based on simple cross-section OLS regressions, and estimators employing standard sample selection correction techniques). The complete model is estimated using a new data set containing information on union status on multiple jobs for individuals in the sample year, permitting comparisons among estimators and choice of a preferred estimator. Results indicate that the estimator of choice is one including sample selection corrections, though care must be taken in establishing exclusion restrictions associated with it. An evaluation of the fit of the complete model indicates that a union differential estimate of 15 percent is robust for Canada in 1986.

Green, Richard

PD May 1991. **TI** Competition in the British Electricity Spot Market. **AU** Green, Richard; Newbery, David M. **AA** Green: Department of Applied Economics, University of Cambridge. Newbery: Department of Applied Economics, University of Cambridge. **SR** CEPR Discussion Paper: 557; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 30. **PR** Pounds 3.00 or $5.00. **JE** 612, 613. **KW** Electricity Supply. Bertrand Competition. Supply Functions.

AB The British electricity supply industry has, with the exception of Nuclear Electric, now been privatized. Bulk supplies of electricity are traded between two dominant generators and many suppliers in an unregulated 'pool'. The generators submit a supply schedule of prices for each generating set and receive the market clearing price, which varies with demand over time. It has been claimed that such Bertrand competition should be highly competitive, bit we show that the Nash equilibrium in supply schedules implies a high mark-up on marginal cost and very substantial deadweight losses.. 5 deadweight losses.

Greenhalgh, Christine

PD December 1990. **TI** Innovation and Export Volumes and Prices: A Disaggregated Study. **AU** Greenhalgh, Christine; Taylor, Paul.; Wilson, Rob. **AA** Greenhalgh: St Peter's College, Oxford. Taylor: Institute for Employment Research, University of Warwick. Wilson: Institute for Employment Research, University of Warwick. **SR** CEPR Discussion Paper: 487; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 33. **PR** Pounds 3.00 or $5.00. **JE** 620, 630, 410. **KW** Industrial Innovation. Trade Performance.

AB The paper explores the role of innovation in the determination of both net exports and export prices. The analysis is conducted for 36 industry groups covering both manufacturers and services in the UK. The data are annual time series and these are analysed using the techniques of cointegration to establish the existence of significant time-series relationships between innovation and trade performance. Alternative econometric estimates of these relationships were obtained for 24 manufacturing industries using patents as the indicator of scientific advance and rising product quality in place of innovations. Patents provide a measure of relative technological performance of the United Kingdom, but for a

smaller range of economic activities. The empirical findings support the view that successful R&D (which can raise product quality or reduce production costs) and good industrial relations (which improve a reliability of supply) have quantitatively significant impacts on the balance of trade in a variety of industries and services. Our findings also raise concern over issues of measurement quality for the monitoring of both input to and outputs from the R&D production process, which is critical for designing policy to improve performance.

Grenier, Gilles

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

Grinblatt, Mark

PD October 1986. **TI** A Put Option Paradox. **AU** Grinblatt, Mark; Johnson, Herbert. **AA** Grinblatt: University of California, Los Angeles. Johnson: University of California, Davis. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 14-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 5. **PR** $2.00; checks payable to U.C. Regents. **JE** G12. **KW** Stock Prices. Stock Market. Finance Theory.

AB What happens to the price of a put in a period where the stock price stays constant? The hedging strategy implicit in the Black-Scholes model would seem to imply that the put goes up in value. Pure arbitrage arguments imply the opposite result. This paper resolves the paradox and uses it to explore the restrictions inherent in the diffusion processes assumed for all option pricing models.

PD February 1987. **TI** The Impact of Performance Based Fees on Pension Fund Management. **AU** Grinblatt, Mark; Titman, Sheridan. **AA** University of California Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 23-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 14. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G23. **KW** Pension Funds. Portfolios. Portfolio Choice.

AB Recently, the Department of Labor and the Securities and Exchange Commission gave their approval to performance-based fee arrangements for managers of pension funds. The change in attitude of these government agencies is widely viewed as an enlightened decision. As a recent Institutional Investor (Hawthorne (1986)) article states, "Pension officers are turning to performance-based systems because they are fed up with shelling out millions of dollars in fees year after year for money management strategies that can't even seem to keep up with the market." It is also widely believed that performance-based fees may create greater incentives for portfolio managers to use their talents for the benefit of the pension fund. In fact, as we will show, these contracts could lead to the opposite result.

PD March 1987. **TI** A Comparison of Measures of Abnormal Performance on a Sample of Monthly Mutual Fund Returns. **AU** Grinblatt, Mark; Titman, Sheridan. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 13-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 38. **PR** $2.00; checks payable to U.C. Regents. **JE** G11, G12. **KW** Portfolio Choice. Mutual Funds.

AB This paper empirically contrasts the Jensen Measure, the Positive Period Weighting Measure, developed in Grinblatt and Titman (1987a), and measures developed from the Treynor-Mazuy (1966) quadratic regression on a sample of 279 mutual funds, using a variety of benchmark portfolios. We find that the measures generally yield similar inferences when using the same benchmark and that inferences can vary, even from the same measure, when using different benchmarks. Several benchmarks, developed here, appear to improve upon traditional benchmarks for assessment of fund performance. These superior benchmarks consist of sets of portfolios formed on the basis of securities characteristics. Tests of fund performance that employ fund characteristics, such as net asset value, load, expenses, portfolio turnover, management fee, and past performance are also reported. These potentially more powerful tests suggest that past performance and turnover are positively related to fund performance.

PD March 1987. **TI** Adverse Risk Incentives and the Design of Performance-Based Contracts. **AU** Grinblatt, Mark; Titman, Sheridan. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 6-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 22. **PR** $2.00; checks payable to U.C. Regents. **JE** G11, G14. **KW** Portfolio Choice. Options.

AB In this paper, option pricing theory is used to value and analyze many performance-based fee contracts that are currently in use. A potential problem with some of these contracts is that they may induce portfolio managers to adversely alter the risk of the portfolios they manage. This paper is prescriptive, in that it derives conditions for contract parameters that provide proper risk incentives for classes of investment strategies. For buy-and-hold and rebalancing strategies, adverse risk incentives are avoided when the penalties for poor performance outweigh the rewards for good performance.

PD November 1987. **TI** Mutual Fund Performance: An Analysis of Quarterly Portfolio Holdings. **AU** Grinblatt, Mark; Titman, Sheridan. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 16-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 17. **PR** $2.00; checks payable to U.C. Regents. **JE** G11, G14. **KW** Portfolio Choice.

AB Previous studies of mutual fund performance have analyzed the net returns of funds, which have fees, expenses, and other transaction costs subtracted from them, or have added an estimate of transaction costs to the net returns to obtain an estimate of gross returns. In addition, these studies analyzed samples that were subject to survivorship bias. This paper employs the quarterly portfolio holding of a large sample of mutual funds to construct an alternative estimate of gross returns. This sample, which is not subject to survivorship bias, is used in conjunction with a sample that contains the actual (net) returns of the mutual funds, which is subject to survival bias. In addition to allowing us to estimate the bias in measured performance that is due to the survival requirement, (less than

0.5% per year for the average fund), and total transaction costs, (about 2.5% per year), the sample is used to test for the existence of abnormal performance.

Grosfeld, Irena

PD June 1991. **TI** Privatization in Hungary, Poland and Czechoslovakia. **AU** Grosfeld, Irena; Hare, Paul. **AA** Grosfeld: DELTA, Paris. Hare: London School of Economics and Heriot-Watt University, Edinburgh. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 31; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 81. **PR** no charge. **JE** L33, P52, O11. **KW** Private Sector. Privatization. Eastern Europe.

AB Privatization is one of the key policy problems for the new Central and Eastern European Governments seeking to bring about the transition to market-type economies. Broadly interpreted, the topic includes both the transfer of existing state firms into private hands, and steps to encourage new business formation and the creation of an entirely new private sector. The three countries studied in this paper have all made a start with their privatization programs, Hungary choosing an approach based on conventional asset sales, Czechoslovakia and Poland paying more attention to the possibility of distributing freely to the population a substantial fraction of their company shares. Both approaches are likely to encounter serious problems.

Gunderson, Morley

PD July 1991. **TI** Economic Issues Pertaining to Pay Equity. **AU** Gunderson, Morley; Riddell, W. Craig. **AA** Gunderson: University of Toronto. Riddell: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-15; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 28. **PR** not available. **JE** J31, J16, J38, J78. **KW** Pay Equity. Comparable Worth. Equal Pay Legislation. Wages. Wage Differentials.

AB This paper discusses economic aspects of pay equity in Canada. We begin by summarizing pay equity legislation in various Canadian jurisdictions. The paper then deals with the potential of pay equity to close the overall male-female earnings gap and discusses its potential and actual economic impact. Economic aspects of the effective design and implementation of pay equity are then discussed, with particular emphasis on unanswered questions and how economic principles may help narrow the range of debate on these issues.

PD July 1991. **TI** Comparable Worth: The Canadian Experience. **AU** Gunderson, Morley; Riddell, W. Craig. **AA** Gunderson: University of Toronto. Riddell: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-16; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 34. **PR** not available. **JE** J31, J16, J38, J78. **KW** Pay Equity. Comparable Worth. Equal Pay Legislation. Wages. Wage Differentials.

AB The paper provides an analysis of comparable worth in Canada -- the country where this procedure has evolved the furthest, especially in the province of Ontario where it is being comprehensively applied in the private sector. The male-female earnings gap is analyzed, with particular reference to its determinants and the potential scope for comparable worth to close that gap. The Canadian legislative initiatives are documented, with particular emphasis on their features with respect to the design, implementation and administration of the policy -- areas that have been neglected in the literature on comparable worth. Illustrative evidence is provided on the impact of comparable worth in Canada. The main policy lessons to be learned from the Canadian experience are discussed.

Gylfason, Thorvaldur

PD April 1991. **TI** Iceland on the Outskirts of Europe: The Common Property Resource Problem. **AA** Gylfason: Faculty of Economics and Business Admin, University of Iceland. **SR** CEPR Discussion Paper: 530; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 19. **PR** Pounds 3.00 or $5.00. **JE** 421, 423, 721. **KW** Iceland. EC Membership. Fisheries. Natural Resources. Environment. Norway.

AB A structural reform of the Icelandic fishing industry which created the conditions for fair and free trade in fishing permits in Icelandic waters could conceivably remove the main current obstacle to EC membership for Iceland. This reform would grant other EC nations formal access to the market for fishing permits, as opposed to access to the resource itself. Many of the arguments presented also apply to Norway. The paper also discusses briefly, similar market solutions to problems arising in the process of economic integration in Europe related to oil extraction, forestry, environmental pollution and traffic congestion.

PD July 1991. **TI** The Interaction of Monetary Policy and Wages. **AU** Gylfason, Thorvaldur; Lindbeck, Assar. **AA** Gylfason: Faculty of Economics and Business Admin, University of Iceland. Lindbeck: Institute for International Economic Studies, University of Stockholm. **SR** CEPR Discussion Paper: 551; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 24. **PR** Pounds 3.00 or $5.00. **JE** 023, 311, 831. **KW** Monetary Policy. Wages. Labour Unions. Non-Neutrality.

AB This paper focuses on the interaction of monetary policy and wage formation in economies with strong labour unions. Government and unions are viewed as endogenous utility maximizers, and the macroeconomic consequences of their interaction are explored with the aid of some elements of game theory. It is shown: (a) how labour unions optimally adjust wages to prices following changes in monetary policy; (b) how the effectiveness of monetary policy is circumscribed without necessarily being completely nullified by the optimal reactions of unions; and (c) how the strategic interplay of government and unions can create a tendency to inflation and unemployment simultaneously.

Gyourko, Joseph

PD March 1990. **TI** Local Market and National Components in House Price Appreciation. **AU** Gyourko, Joseph; Voith, Richard. **AA** Gyourko: Federal Reserve Bank of Philadelphia and University of Pennsylvania. Voith: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-10; Working Papers, Department of Research, Federal Reserve Bank of

Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 36. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** R31, R21. **KW** Real Estate. Housing. Urban Economics.

AB We empirically analyze real home price appreciation using a particularly long time series (1971-1989) and wide cross-section (56 metro areas). Our findings yield important new insights into two outstanding issues in real estate finance and economics. The first deals with the implications for investment opportunities in housing across metro areas. A striking result is that we cannot reject the null of equal appreciation rates across locales. You could have (randomly) invested in any of our markets and done equally well over the two decade period. However, it is noteworthy that we find persistence in the local appreciation series. This is consistent with previous findings by Case and Shiller (1989), and implies that prescient market timers might have been able to make money in selective markets.

Hajivassiliou, Vassilis A.

PD December 1990. **TI** The Method of Simulated Scores for the Estimation of LDV Models with an Application to External Debt Crises. **AU** Hajivassiliou, Vassilis A.; McFadden, Daniel L. **AA** Hajivassiliou: Yale University. McFadden: Massachusetts Institute of Technology. **SR** Yale Cowles Foundation Discussion Paper: 967; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 64. **PR** $2.00. **JE** C24, C15, C13. **KW** Simulation Model. Asymptotic Theory. Censored Model.

AB The method of simulated scores (MSS) is presented for estimating LDV models with flexible correlation structure in the unobservables. We propose simulators that are continuous in the unknown parameter vectors, and hence standard optimization methods can be used to compute the MSS estimators that employ these simulators. We establish consistency and asymptotic normality of the MSS estimators and derive suitable rates at which the number of simulations must rise if biased simulators are used. The estimation method is applied to analyze a model in which the incidence and the extent of debt repayments problems of LDC's are viewed as optimized choices of the central authorities of the countries in a framework of credit rationing. The econometric implementation of the resulting multi-period probit and Tobit models avoids the need for high dimensional integration. Our findings show that the restrictive error structures imposed by past studies may have led to unreliable econometric results.

Haller, Hans

PD January 1991. **TI** Collusion Paradoxes of the Shapley Value. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E-91-01-02; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** 10. **PR** free by request. **JE** D71, D72. **KW** Collusion. Voting.

AB Two players enter the game with a prior proxy or merger agreement in order to strengthen their positions. There exist weighted majority voting games where a proxy agreement weakens the two players' collective power: the sum of their Shapley values with the agreement is less than without the agreement. This phenomenon cannot happen in non-trivial one man-one vote majority voting games. In contrast, a merger agreement weakens the two players' collective power in one man-one vote majority voting games with a sufficiently high quorum.

Haltiwanger, John

TI Wage Dispersion between and within U.S. Manufacturing Plants, 1963-1986. **AU** Davis, Steve J.; Haltiwanger, John.

Hamilton, Carl B.

PD April 1991. **TI** The Nordic EFTA Countries' Options: Seeking Community Membership or a Permanent EEA-Accord. **AA** Hamilton: Institute for International Economic Studies, Stockholm. **SR** CEPR Discussion Paper: 524; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 40. **PR** Pounds 3.00 or $5.00. **JE** 122, 421, 422, 423. **KW** EFTA. EC. Integration. Europe. Nordic Countries.

AB Beyond 1992 the EFTA countries face the choice between a permanent European Economic Area (EEA) accord, and seeking full membership of the European Community. The paper analyses this choice, focusing on the Nordic EFTA countries.

Hanemann, W. Michael

TI Valuation of Tropical Forests. **AU** Fisher, Anthony C.; Hanemann, W. Michael.

Hare, Paul

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

Harris, Christopher J.

PD December 1990. **TI** The Existence of Subgame-Perfect Equilibrium in Games with Simultaneous Moves: A Case for Extensive-Form Correlation. **AA** Nuffield College. **SR** Massachusetts Institute of Technology Department of Economics Working Paper: 570; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 63. **PR** $6.00 Domestic, $8.00 Overseas, $2.00 Student. **JE** C73. **KW** Dynamic Games. Perfect Equilibrium. Game Theory.

AB The starting point of this paper is a simple, regular, dynamic game in which subgame perfect equilibrium fails to exist. Examination of this example shows that existence would be restored if players were allowed to observe public signals. The main result of the paper shows that allowing the observation of public signals yields existence, not only in the example, but also in an extremely large class of dynamic games.

Heal, Geoffrey

TI Existence of Equilibrium in Regular Economies with Incomplete Markets. **AU** Chichilinsky, Graciela; Heal, Geoffrey.

TI Competitive Equilibrium in Soboley Spaces with Unbounded Short Sales. **AU** Chichilinsky, Graciela; Heal, Geoffrey.

TI Necessary and Sufficient Conditions for Pareto Efficiency of Equilibrium in Non-Convex Economies. **AU** Chichilinsky, Graciela; Heal, Geoffrey.

TI Necessary and Sufficient Conditions for Pareto Efficiency of Equilibrium in Non-Convex Economies. **AU** Chichilinsky, Graciela; Heal, Geoffrey.

TI On Incomplete Financial Markets. **AU** Chichilinsky, Graciela; Heal, Geoffrey.

TI Competitive Equilibrium in Sobolev Spaces with Unbounded Short Sales. **AU** Chichilinsky, Graciela; Heal, Geoffrey.

Henderson, J. Vernon

PD January 1991. **TI** Public Sector Efficiency with Imperfectly Competitive Communities. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 91-4; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 38. **PR** not available. **JE** H71, R51, R13, R11. **KW** Fiscal Policy. Public Goods. Local Governments. Government Finance. Property Taxes. Regional Economics. Communities.

AB This paper examines the fiscal policies of residential communities under very general conditions. One question concerns what types of financing communities will choose-property tax versus land taxes, user fees, or income taxes. Another concerns whether public services will be set at first best levels, or "over" or "under" provided. The answers in this paper contradict the literature, suggesting that the use of property taxes to price fiscal externalities of migrants will generally not occur. The general context is a region or metro area jurisdictionally fragmented into a limited number of communities. Residents of the metropolitan area are shareholders in its land area and may realize capital gains and losses in income from land price changes. The paper shows that in a generalized shareholding context with imperfect competition, communities will not use property taxes to finance public service expenditures and will choose Pareto efficient levels of expenditures.

Hendricks, Kenneth

PD January 1991. **TI** Auctions for Oil and Gas Leases with an Informed Bidder and a Random Reservation Price. **AU** Hendricks, Kenneth; Porter, Robert H.; Wilson, Charles A. **AA** Hendricks: University of British Columbia. Porter: Northwestern University. Wilson: New York University. **SR** University of British Columbia Department of Economics Discussion Paper: 91-06; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 63. **PR** not available. **JE** D44, Q31. **KW** Bidding. Oil. Auctions. Energy. Leases.

AB The paper analyzes a first price, sealed bid auction with a random reservation price where the object has an unknown common value, but one buyer has better information than the others. We permit the reservation price to be correlated with the information of the informed buyer, which reflects both his assessment of the value of the object and the probability of rejection at any bid.

Hirsch, Werner Z.

PD May 1991. **TI** Local Governments: Putting a Contract Out on Costs. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 621; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 13. **PR** $2.50; checks payable to U.C. Regents. **JE** L33, H77, O53. **KW** Privatization. Turkey.

AB Government structures of many countries have undergone changes in recent years. The experiment with federalism of the United States has been a guiding light and so have its intricate fiscal intergovernmental relations. This paper is based on the premise that many countries, including Turkey, might want to reexamine their intergovernmental grant system. Thus after this short introduction, this paper will briefly review the role of Turkey's various governments and their interrelations. Next, reasons for and purposes of intergovernmental grants will be examined, to be followed by a systematic analysis of major grant types and their likely effects. Finally, a short summary will be offered.

PD May 1991. **TI** Role and Influence of Intergovernmental Grants on Local Finance. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 622; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 18. **PR** $2.50; checks payable to U.C. Regents. **JE** L33, J45, H72. **KW** Privatization. Public Sector.

AB Contracting out, a special type of privatization, is vociferously praised by some as offering a solution to many of local government's financial ills, whereas others speak about it in most disdainful and depreciating terms. The first group consists mainly of political conservatives, preoccupied with curing an anemic and inefficient economy. The second group is dominated by liberals, particularly labor leaders and minorities, who see employment in the public sector as work opportunity from which to climb up the social ladder. This paper is offered in the hope of providing a framework for evaluating the policy positions of the two opposing groups. It is written from the point of view that intellectual inquiry should be an assault on ignorance; its creed is that knowledge is a good thing; and its boast is that progress depends on knowledge.

Hirshleifer, David

PD January 1986. **TI** Intermediate Agricultural Firms as Diversifiers of Output Risk. **AA** University of California at Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 3-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 17. **PR** $2.00; checks payable to U.C. Regents. **JE** Q13, Q14, G13. **KW** Futures Prices. Hedging. Agriculture. Commodities.

AB This paper examines the incentive of intermediate agricultural firms to purchase forward crop shares from multiple growers. The advantage of such purchases is diversification of the idiosyncratic components of output risks. Sufficient conditions for profitable diversification are provided even when transaction or monitoring costs deter small crop share purchases. Futures trading and share contracting are complementary means of transferring risk. The benefits to diversification are actually increased when a futures market is available to transfer risks. Futures contracts are useful as hedges of systematic but not idiosyncratic components of output risk. The model implies that diversification through share contracting is most likely to be profitable for farms whose outputs have a relatively small common component.

PD September 1986. **TI** Cooperation in a Finitely Repeated Prisoner's Dilemma Game with Ostracism. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 18-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 9. **PR** $2.00; checks payable to U.C. Regents. **JE** C71, H41. **KW** Cooperative Games. Cooperation. Repeated Game. Public Good.

AB This paper examines how cooperation can arise in a repeated multi-player Prisoners' Dilemma game with ostracism, that is, where players who defect in earlier rounds may be expelled from the group. If there are increasing returns in the production of some public good, and if all players are identical, it might seem that there is a perfectness problem in the threat to punish shirkers by ostracism. Despite this, an equilibrium is for all players to cooperate until the final round, and then defect.

TI Price Discrimination through Offers to Match Price. **AU** Png, I. P. L.; Hirshleifer, David.

PD June 1987. **TI** Determinants of Hedging and Risk Premia in Commodity Futures Markets. **AA** University of California at Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 24-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 32. **PR** $2.00; checks payable to U.C. Regents. **JE** G13, G12. **KW** Futures Markets. Hedging. Commodities. Futures Pricing.

AB This paper examines the determinants of commodity futures hedging and risk premia in a framework which unifies some of the major branches of thought about futures markets. The model integrates both stock market and futures trading opportunities; demand as well as output shocks, and variable costs as well as revenues from production. The model describes how hedging by different producers is related to their output distributions and returns on the stock market. Transaction costs affect the relative impact of hedging by producers versus consumers for futures prices. Output shocks lead to stochastic redistribution of wealth between the two groups; with trading costs, this distribution risk is priced.

PD August 1987. **TI** Risk, Futures Pricing and the Organization of Production in Commodity Markets. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 22-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 17. **PR** $2.00; checks payable to U.C. Regents. **JE** L23, G13, G14, L22. **KW** Futures Pricing. Futures Market. Commodities.

AB This paper examines equilibrium in a spot and futures market with both primary producers (growers) and intermediate producers (processors). For a commodity that is subject to output shocks, processors tend to hedge long, in contrast with Hicks' theory of futures hedging. Nevertheless, if transaction costs are low, the two-stage production process brings about a downward futures price bias, consistent with Hicks' pricing prediction. But if costs of trading futures are high, growers tend to be differentially driven from the futures market, reversing the direction of the bias. Futures trading may also affect the organization of industry; when demand is inelastic, futures trading can serve as a substitute for vertical integration as a means of diversifying risk, because the risk positions of growers are complementary with those of processors.

PD November 1987. **TI** Residual Risk, Trading Costs and Commodity Futures Risk Premia. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 1-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 27. **PR** $2.00; checks payable to U.C. Regents. **JE** G13, G14, G12. **KW** Futures Market. Asset Pricing Model. Trading. Commodities.

AB If a fixed setup cost to speculators of trading in a commodity futures market is added to a Mayer's CAPM setting, the number of participating speculators becomes endogenous. In consequence, the deviation from the perfect markets CAPM premium rises in absolute value with the square root of the trading cost and with the standard deviation of residual returns, but is unrelated to covariance with non-marketable wealth. Telser (1958) argued that the bias induced by hedging pressure should be small, because the number of potential outside risk-bearers is large compared to the size of agricultural risk to be hedged. However, with barriers to participation, the residual risk premium depends not on the total magnitude of risk to be hedged (i.e., aggregate revenue variance) but on the variability of revenue relative to its mean (i.e., the coefficient of variation), so even a minor commodity may produce a large risk premium, if the revenue derived from it has a large coefficient of variation.

PD January 1988. **TI** Storage and Futures Trading: A Multiperiod Analysis. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 4-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 34. **PR** $2.00; checks payable to U.C. Regents. **JE** Q13, G13. **KW** Futures Pricing. Commodities. Futures Markets.

AB This paper provides an analysis of storage and futures trading in which producers survive for many harvests. Examining how risks are distributed between storers and growers in equilibrium leads to results which differ drastically from previous models. When storage is costly, rather than hedging stocks short fully, storers may take long hedging positions. Contrary to the conventional view (beginning with Keynes and Hicks), costless storage does not cause "normal backwardation." Hedging against the optimally varying storage and planting costs to be incurred promotes upward and downward futures price bias respectively. When growers and storers have negatively correlated risks, futures trading can substitute for vertical integration as a means of reducing risk.

Hoff, Karla

PD April 1991. **TI** The Second Theorem of the Second Best. **AA** University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-13; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 37. **PR** no charge. **JE** D61, D82, H21, D31, D52. **KW** Moral Hazard. Incomplete Markets. Land Reform. Efficient Allocation. Wealth Distribution.

AB This paper examines four economies that are constrained

Pareto efficient (one person cannot be made better off without another person being made worse off given the available markets and information) but in which waste arises from the absence of a complete set of Walrasian markets. The economies entail two kinds of waste: misallocation of resources between safe and risky activities, and labor unemployment. In each economy the level of waste depends on the distribution of wealth. I then show that this is a general result for second-best economies. The result suggests that the conventional view of the equity-efficiency trade-off is seriously incomplete. Some evidence of the importance of wealth distribution for efficiency is presented.

Holtmann, A. G.

PD January 1991. **TI** Employer Size, Training, and Wage Growth. **AU** Holtmann, A. G.; Idson, Todd. **AA** Holtmann: University of Miami. Idson: Columbia University. **SR** Columbia Department of Economics Working Paper: 513; Department of Economics, Columbia University, New York, New York 10027. **PG** 17. **PR** $5.00. **JE** J31, L11, J41, J38. **KW** Wages. Firm Size. Training. Wage Growth. Minimum Wage.

AB Since Richard Lester (1967) first documented systematic employer size effects on labor market outcomes, a substantial body of research has been undertaken on the relationship between employer size and wages, training, and both turnover and wage growth. This paper extends this line of inquiry by looking at how the relationship between on-the-job training (OJT) and wage growth may differ between large and small firms. We then apply our conclusions concerning the differential effect of OJT on wage growth in different size firms to differences in the effect of minimum wages on wage growth in different size firms.

PD January 1991. **TI** Employer Size and On-the-Job Training Decisions. **AU** Holtmann, A. G.; Idson, Todd. **AA** Holtmann: University of Miami. Idson: Columbia University. **SR** Columbia Department of Economics Working Paper: 512; Department of Economics, Columbia University, New York, New York 10027. **PG** 20. **PR** $5.00. **JE** J24, L21. **KW** Firm Size. Training. Human Capital.

AB This article advances, and tests, a novel explanation for the observed positive relationship between employer size and the provision of on-the-job training. Empirical support is found for the hypothesis that in addition to providing more training for their work force, larger employers will also be more willing to devote their training resources to relatively riskier human capital investments. We find that, (i) the likelihood of participation in an employer provided training program is generally greater in larger establishments, (ii) although women are less likely to participate, the negative effect of gender on participation is smaller in larger establishments, and (iii) both more educated workers and union workers are more likely to participate, with the effect of both factors somewhat attenuated in larger establishments.

PD April 1991. **TI** Wage Determination of Registered Nurses in Proprietary and Non-Profit Nursing Homes. **AU** Holtmann, A. G.; Idson, Todd. **AA** Holtmann: University of Miami. Idson: Columbia University. **SR** Columbia Department of Economics Working Paper: 536; Department of Economics, Columbia University, New York, New York 10027. **PG** 23. **PR** $5.00. **JE** J31, I11, L31, D23. **KW** Nursing. Wages. Occupation. Health Care Markets.

AB This study explores why registered nurses employed in non-profit nursing homes earn higher wages than those employed in proprietary facilities. Previous studies have explained this finding in a property rights context, where higher wages were posited to result from the weaker incentives for cost minimization accompanying non-profit status. This paper tests an alternative explanation of sectoral wage differences which is predicated on the reason for the coexistence of for profit and non-profit firms in a given industry. Informational constraints concerning the quality of care are posited to cause the long-term health care market to fail to provide care at the upper levels of a quality of care continuum. Non-profits are viewed as a response to this form of market failure, acting to fulfill customers demand for higher quality (and higher cost) long-term care, with attendant demand for higher quality nurses than in for profit homes. Both the observed sectoral pattern in selectivity, and wage decompositions based on selectivity corrected wage regressions, call into question the property right explanation yet are consistent with an asymmetric information explanation.

Honkapohja, Seppo

PD May 1991. **TI** Precautionary Saving, Government Policy and Growth in a Stochastic Cash-in-Advance Economy. **AU** Honkapohja, Seppo; Lempinen, Urho. **AA** Honkapohja: Department of Economics, University of Helsinki. Lempinen: Department of Economics, University of Helsinki. **SR** CEPR Discussion Paper: 529; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 38. **PR** Pounds 3.00 or $5.00. **JE** 023, 311, 321. **KW** Ricardian Neutrality. Superneutrality. Monetarist Arithmetic.

AB This paper uses a stochastic growth model with consumption, saving, portfolio choice between real capital and government bonds and money holding as a cash-in-advance constraint. It shows that money supply changes due to government expenditure changes or open market operations are never superneutral. In contrast, income tax changes only have nominal effects. Furthermore, Ricardian neutrality does not hold in the model. The real effects are weakened and nominal ones strengthened by increased risk aversion resulting in increased precautionary saving.

Hooker, Mark A.

TI Misspecification in the Cagan Hyperinflation Model. **AU** Durlauf, Steven N.; Hooker, Mark A.

Hudson, Yana

TI The Characteristics of Home Mortgage Debt, 1970-89: Trends and Implications. **AU** Goodman, Jack L., Jr.; Hudson, Yana; Yermish, Scott.

Hughes, Gordon

PD May 1991. **TI** Foreign Exchange, Prices and Economic Activity in Bulgaria. **AA** Hughes: Department of Economics, University of Edinburgh. **SR** CEPR Discussion Paper: 549; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 42. **PR** Pounds 3.00 or $5.00. **JE** 052, 133, 227, 431. **KW** Inflation. Exchange Rate. Input-Output. Stabilization Policy.

AB Bulgaria, like other socialist economies in transition, is attempting to implement an ambitious programme which combines a price reform to reduce price distortions and to liberalize pricing mechanisms, with macroeconomic stabilization to reduce the budget deficit and lower the underlying rate of inflation. The paper develops an input-output model to investigate the relationship between the exchange rate and the domestic price level. It shows that the success of the reform programme is closely linked to the path followed by the exchange rate. The government's stated policy is that it will not attempt to control the level of the exchange rate. The simulations suggest, however, that the government should use the exchange rate as the real anchor for the reform programme that is, by targeting a level for the real exchange rate rather than the nominal exchange rate. Under such a policy it will be able to implement the necessary adjustments to controlled prices for food and energy without re-initiating the inflationary spiral that began in 1990.

Huh, Keun

PD February 1991. **TI** Estimation of the Survivor Model by Nonparametric Maximum Likelihood, Maximum Penalized Likelihood and Simulation Based Estimation. **AU** Huh, Keun; Sickles, Robin C. **AA** Huh: Economic Research Institute, Samsung Industries. Sickles: Rice University. **SR** New York University Economic Research Reports: 91-16; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 58. **PR** no charge. **JE** C41, C23, C14, C15. **KW** Nonparametric Estimation. Duration Analysis. Heterogeneity. Maximum Likelihood. Panel Data. Monte Carlo. Simulation Model.

AB Standard treatments of heterogeneity components in typical longitudinal analyses can result in an incorrect parameterization of the survivor model. As a consequence, estimation bias is not limited to duration dependence but extends to the structural parameters as well. One approach to dealing with the heterogeneity components is to use a nonparametric mass point estimator to specify the marginal likelihood. We propose two additional methods to deal with this issue: maximum penalized likelihood estimation and simulation based estimation. Maximum penalized likelihood estimates the mixed joint density while smoothing the influences of unobserved heterogeneity and maximizing goodness of fit. Simulation based estimation maximizes the Pearson correlation between the simulated and observed frequencies of duration times based on axioms that describe the data generating process.

TI R&D Reactions to High-Technology Import Competition. **AU** Scherer, F. M.; Huh, Keun.

Humphrey, David B.

TI Measurement and Efficiency Issues in Commercial Banking. **AU** Berger, Allen N.; Humphrey, David B.

Hurley, William J.

PD April 1990. **TI** The Feasibility of High-Speed Rail in Canada. **AU** Hurley, William J.; Jones, Joseph. **AA** Hurley: Royal Military College. Jones: Queen's University. **SR** Queen's John Deutsch Institute Discussion Paper: 14; c/o Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 24. **PR** $3.00 Canada and U.S.; $3.50 Foreign. **JE** R41. **KW** Transportation System. Rail System. Transportation Demand.

AB The paper examines the feasibility of High Speed Rail in the Montreal-Ottawa-Toronto corridor in Canada. In particular, demand, cost and investment information for this corridor provide the basis for an estimate of the project's NPV and associated risk. Based on current expectation of demand, High Speed Rail will not run as a privately financed, stand-alone project.

Idson, Todd

TI Employer Size, Training, and Wage Growth. **AU** Holtmann, A. G.; Idson, Todd.

TI Employer Size and On-the-Job Training Decisions. **AU** Holtmann, A. G.; Idson, Todd.

TI Wage Determination of Registered Nurses in Proprietary and Non-Profit Nursing Homes. **AU** Holtmann, A. G.; Idson, Todd.

Ilan, Yale

PD September 1986. **TI** Economic Evaluation of Remuneration from Patents and Technology Transfer. **AU** Ilan, Yale; Galai, Dan. **AA** Ilan: Technion. Galai: The Hebrew University of Jerusalem and University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 26-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 19. **PR** $2.00; checks payable to U.C. Regents. **JE** L14, O32. **KW** Contracts. Technology. Knowledge.

AB One of the most critical and complex issues to be resolved between a would-be supplier (licensor) and recipient (licensee) of technological know-how is the monetary value, or price, of the "merchandise" transferred. This price is a function of a number of factors, including the nature of the item in question and the risk and return associated with its commercialization.

Ioannides, Yannis M.

PD May 1991. **TI** Product Differentiation and Endogenous Growth in a System of Cities. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: NA; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** 28. **PR** free by request. **JE** R11, L13, O41. **KW** Endogenous Growth. Product Differentiation. Monopolistic Competition. Urban Economics.

AB This paper adapts the Dixit-Stiglitz-Romer model of product diversity and monopolistic competition as a growth model for a Henderson-type system of cities with an overlapping generations structure. The life cycle savings of individuals are invested in urban overhead and manufacturing capital. Each city specializes in the production of a single differentiated commodity. Land developers and city governments create new cities in line with the demand for differentiated products. Under the assumption of intracity and intercity locational equilibrium, at which the number of cities exponentially grows at the same rate as population and the equilibrium city size is constant. The result that lifetime utility increases exponentially along the steady state is due entirely to

the monopolistic competition structure of the model.

Irwin, Douglas A.

TI World Commodity Prices: The Role of External Debt and Industrial Country Policies. **AU** Rausser, Gordon C.; Rose, Marjorie B.; Irwin, Douglas A.

Jack, Bryan

PD February 1991. **TI** A More General Statement of Neutrality in Nash Provision of Pure Public Goods. **AA** University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-6; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 10. **PR** no charge. **JE** H41, D60. **KW** Public Goods. Nash Equilibrium.

AB This paper examines voluntary, Nash equilibrium provision of a pure public good, across all possible distributions of wealth among n parties. Previous researchers have established neutrality results only for sets of parties in which everyone contributes (Warr, 1983), or by showing comparative statics impacts upon the level of public good, between pairs of distribution of wealth (Bergstrom, Blume and Varian, 1986). I define the level of public good provision as a function, Y(W), over the set of all possible distributions, and then examine the gradient of this function. I also define a set of vectors, R, in a one-to-one correspondence with each region of the range of distributions that has a distinct set of contributors, C, to the public good. The elements of R are independent of individual parties' demand functions for the public good. If the public good is normal to all parties, I then prove a more general neutrality result: Gradient(Y) is parallel to and points in the same direction as the vector r(C) an element of R characteristic to that portion of the range of distributions.

Jacoby, Sanford M.

PD April 1991. **TI** Employment Duration and Industrial Labor Mobility in the United States. 1880-1980. **AU** Jacoby, Sanford M.; Sharma, Sunil. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 618; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 30. **PR** $2.50; checks payable to U.C. Regents. **JE** N31, N32, J64. **KW** Labor Mobility. Duration Models. Employment. Unemployment. Tenure.

AB Recent studies of job tenure raise the question of the appropriate duration statistic to use in historical research. This article compares duration measures and examines their empirical and theoretical implications for historical research on employment tenure. Using a variety of data from the late 19th and early 20th centuries, the authors find that there existed a sector of stable jobs but that most industrial jobs were brief. Since World War I, however, there has been a sharp shift in the relative size and importance of the short- and long-term job sectors.

Jarley, Paul

TI A Comparison of Interest Arbitrator Decision-Making in Experimental and Field Settings. **AU** Olson, Craig A.; Dell'Omo, Gregory G.; Jarley, Paul.

Jegadeesh, Narasimhan

PD November 1987. **TI** Evidence of Predictable Behavior of Security Returns. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 6-88; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 29. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G14, G11. **KW** Stock Market. Stock Prices. Portfolio Choice.

AB This paper presents empirical evidence that the monthly risk adjusted excess returns of NYSE stocks are systematically related to their previous period of returns as far back as thirty-six months. The pattern of dependence exhibits seasonality, with the pattern in January significantly different from that in the other months. Using the observed relationship "one-step-ahead" return forecasts are made and ten portfolios are formed based on the forecasts. The difference between risk adjusted excess returns on the extreme decile portfolios over the period 1934-1981 is an impressive 2.59 percent per month. Several possible explanations for the empirical regularity are considered but none of them appear entirely adequate.

John, Kose

PD March 1991. **TI** Risk-Shifting Incentives of Depository Institutions: A New Perspective on Federal Deposit Insurance Reform. **AU** John, Kose; John, Teresa A.; Senbet, Lemma W. **AA** Kose John and Teresa John: New York University. Senbet: University of Maryland. **SR** New York University Salomon Brothers Center Working Paper: S-91-27; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 31. **PR** $5.00. **JE** G21, G28. **KW** Commercial Banks. Banking. Deposit Insurance.

AB We characterize the risk shifting incentives of a depository institution as arising fundamentally from the existence of limited liability and the associated convex payoff to equityholders. This risk incentive feature is unchanged by deposits being insured, and hence excessive risk taking by depository institutions is not solely attributable to the flat rate insurance premium. Consequently, the incentive problem cannot be resolved through a risk based insurance premium, contrary to the prevailing view. We propose a solution that eliminates risk shifting through an optimal tax structure and specify a corresponding insurance premium that is revenue neutral from the social planner's (regulator's standpoint). The solution is derived in the context of a social objective function that trades off the benefits of liquidity services by banks and the unique informational role of bank loans with the costs of investment distortions engendered by risk shifting.

John, Teresa A.

TI Risk-Shifting Incentives of Depository Institutions: A New Perspective on Federal Deposit Insurance Reform. **AU** John, Kose; John, Teresa A.; Senbet, Lemma W.

Johnson, Herbert

TI A Put Option Paradox. **AU** Grinblatt, Mark; Johnson, Herbert.

Jones, Joseph

TI The Feasibility of High-Speed Rail in Canada. **AU** Hurley, William J.; Jones, Joseph.

Jones, Stephen R. G.

PD July 1991. **TI** The Measurement of Labour Force Dynamics with the Labour Market Activity Survey: The LMAS Filter. **AU** Jones, Stephen R. G.; Riddell, W. Craig. **AA** Jones: McMaster University. Riddell: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-17; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 51. **PR** not available. **JE** C42, C81, J64. **KW** Unemployment. Survey Design. Surveys.

AB The Labour Market Activity Survey (LMAS) represents a significant advance in Canadian data collection, providing for the first time longitudinal data on a representative sample of the labor force. This paper examines the implications of the LMAS questionnaire structure for the study of labor market dynamics. To do this we explain how the LMAS would report the various sequences of labor force states that might occur, and therefore how the questionnaire structure may filter the true underlying data. We also carry out a series of simulations designed to provide a quantitative assessment of the importance of this filter for the incidence and duration of spells and transitions between labor force states.

Joshi, Heather

PD May 1991. **TI** The Pension Consequences of Divorce. **AU** Joshi, Heather; Davies, Hugh. **AA** Joshi: London School of Hygiene and Tropical Medicine. Davies: Department of Economics, Birkbeck College, London. **SR** CEPR Discussion Paper: 550; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 88. **PR** Pounds 3.00 or $5.00. **JE** 826, 840, 914, 915. **KW** Gender Relations. Pensions. Marriage. Divorce. Settlement. Opportunity Cost of Children.

AB Women's disadvantages on the labour market leave them financially vulnerable when divorced. The number of elderly divorced women is growing, but their pension prospects are poor. The paper outlines current British arrangements for pensions and their treatment in divorce, and explains the case for new law on pension splitting. Men's and women's lifetime earnings are simulated on the basis of econometric estimates, as are their pension entitlements under SERPS, Money Purchase and Final Salary Schemes. Pension splitting after divorce is also simulated. It does not invariably guarantee pension adequacy, nor necessarily compensate for the pension mothers forego to rear children. Better Basic Pension would do better.

Just, Richard E.

PD September 1990. **TI** Modeling Policy Reform in the U.S. Wheat and Feed Grain Sectors. **AU** Just, Richard E.; Rausser, Gordon C.; Zilberman, David. **AA** Just: University of Maryland. Rausser and Zilberman: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 561; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 78. **PR** $17.60. **JE** F13, Q18, Q17. **KW** Policy Reform. Trade Policy. Tariffs. Agriculture. Agricultural Policy.

AB The objective of this chapter is to investigate policy reform which makes welfare improving policies politically sustainable. While many papers have investigated the effects of trade liberalization in connection with the current round of General Agreement on Tariffs and Trade (GATT) negotiations, not one study has specifically examined the empirical implications of the U.S., European, Cairnes Group, or Canadian proposals.

PD October 1990. **TI** Compensation and Political Feasibility: Facilitating Welfare Improving Policies. **AU** Just, Richard E.; Rausser, Gordon C.; Zilberman, David. **AA** Just: University of Maryland. Rausser and Zilberman: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 565; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 34. **PR** $6.80. **JE** D51, F13, D61, D62. **KW** Trade Liberalization. Welfare Economics. Economic Policy. Free Market. Market Economies.

AB There is a broad consensus among economists, policy-makers, and informed citizens that free market economies do not preclude many inefficiencies in resource allocation. There are many circumstances where policy interventions have the potential to achieve a "Pareto improvement" in the sense of making some people better off without making others worse off. The challenge to any particular market-oriented society is to design those mechanisms, organizations and institutions that identify the limitations of free markets and result in those reforms that seek Pareto-improved outcomes. Several phenomena have been identified that lead to suboptimal performance of competitive markets. Traditional welfare economics has identified externalities and public goods as sources of "market failure." Without adequate intervention, competitive markets may lead to the excessive generation of those goods responsible for negative externalities and the underprovision of goods resulting in positive externalities. An incomplete set of risk markets is another potential reason for suboptimal behavior.

Kahn, Charles M.

PD February 1991. **TI** Efficiency of Markets under Moral Hazard with Side-Trading. **AU** Kahn, Charles M.; Mookherjee, Dilip. **AA** Kahn: University of Illinois, Urbana-Champaign. Mookherjee: Indian Statistical Institute, New Delhi. **SR** Economics Research Center/NORC Discussion Paper: 91-4; Economics Research Center/NORC, 1155 E. 60th St., Chicago, Illinois 60637. **PG** 39. **PR** $2.00; send requests to Librarian, NORC. **JE** G22, D81, D82. **KW** Insurance. Incentives. Contracts.

AB This paper examines the efficiency of decentralized activity in market equilibrium under incentive constraints. We focus on insurance markets with moral hazard, under varying assumptions regarding the structure of information available to agents trading with one another. In particular, we examine contexts where, in addition to the unobservability of effort levels, trades between an insurer and insured are not observable to other insurance firms. Such contexts generate "incentive externalities," owing to the unenforceability of exclusive contracts involving limited insurance. We contrast this with contexts where trades and/or effort are publicly observable.

PD July 1991. **TI** Coalition Proof Equilibrium in an Adverse Selection Insurance Economy. **AU** Kahn, Charles M.; Mookherjee, Dilip. **AA** Kahn: University of Illinois, Urbana-Champaign. Mookherjee: Indian Statistical Institute, New Delhi. **SR** Economics Research Center/NORC

Discussion Paper: 91-5; Economics Research Center/NORC, 1155 E. 60th St., Chicago, Illinois 60637. **PG** 30. **PR** $2.00; send requests to Librarian, NORC. **JE** G22, D82, C78. **KW** Insurance. Coalitions. Contracts. Private Information.

AB We extend the notion of Coalition Proof Nash Equilibrium to a class of matching games with private information. This solution concept is applied to an adverse selection insurance economy, and is shown to yield a unique allocation: the separating allocation without cross-subsidy. The relation to alternative approaches to modeling contracting games with private information, such as the Incentive Compatible Core, is discussed.

Kalaba, Robert

PD July 1989. **TI** Nonlocal Automated Sensitivity Analysis. **AU** Kalaba, Robert; Tesfatsion, Leigh. **AA** University of Southern California. **SR** University of Southern California Modelling Research Group Working Paper: M8911; Department of Economics, University of Southern California, University Park, Los Angeles, CA 90089-0152. **PG** 27. **PR** not available. **JE** C61, C88. **KW** Nonlinear System. Optimization Problem. Computer Software. Initial Conditions.

AB Previously a complete ODE system was developed for tracking the solution x(alpha) of a parameterized system of nonlinear equations, sigma(x, alpha)=0 over an alpha-interval (alpha(0),alpha(1)). This paper develops a two-phase complex homotopy continuation method for obtaining the required initial conditions at alpha(0). An initial "short" artificial continuation is followed by a continuation which essentially proceeds through the physically meaningful function sigma, which can ameliorate the problem of artificially induced singularities. Also, the path in the complex plane followed by the continuation parameter in each phase evolves sequentially in an attempt to keep the path both short (minimal number of integration steps) and numerically stable (avoidance of singular points). A FORTRAN program Nasa is provided for solving the complete ODE system starting with a two-phase initialization. The program also incorporates a fast and efficient procedure for the automatic evaluation of derivatives. Numerical experiments are reported which illustrate the program's effectiveness.

PD August 1989. **TI** Linear and Nonlinear Associative Memories for Parameter Estimation. **AU** Kalaba, Robert; Lichtenstein, Z.; Simchony, T.; Tesfatsion, Leigh. **AA** University of Southern California. **SR** University of Southern California Modelling Research Group Working Paper: M8913; Department of Economics, University of Southern California, University Park, Los Angeles, CA 90089-0152. **PG** 18. **PR** not available. **JE** C31, C67, C13, C61. **KW** Memory. Nonlinear Systems. Output. Estimation.

AB This paper proposes the use of associative memories for obtaining preliminary parameter estimates for nonlinear systems. For each parameter vector r(i) in a selected training set, the system equations are used to determine a vector s(i) of system outputs. An associative memory matrix M is then constructed which optimally, in the least squares sense, associates each system output vector s(i) with its corresponding parameter vector r(i). Given any observed system output vector s*, an estimate r hat for the system parameters is obtained by setting r hat=(M hat)s*. Numerical experiments are reported which indicate the effectiveness of this approach, especially for the nonlinear associative memory case in which the training vectors s(i) include not only the system output levels but also products of these levels. Training with noisy output vectors is shown to improve the accuracy of the parameter estimates when the observation vectors s* are noisy. If experimental data are available for use as the training set, the estimation procedure can be carried out without knowing the system equation.

Kalai, Ehud

TI Dividing a Cake by Majority: The Simplest Equilibria. **AU** Baron, David; Kalai, Ehud.

PD January 1991. **TI** Rational Learning Leads to Nash Equilibrium (A New Extended Version). **AU** Kalai, Ehud; Lehrer, Ehud. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 925; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 40. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** C71, D83. **KW** Repeated Game. Learning. Nash Equilibrium. Cooperative Games.

AB Each of n players, in a discounted infinitely repeated game, starts with private beliefs about his opponents' strategies. If the individual beliefs are compatible with the true strategies chosen, then Bayesian updating will eventually lead to accurate prediction of the future play of the game. If, in addition, each player knows his own payoff matrix and maximizes his expected utility, then they will eventually play according to a Nash equilibrium of the repeated game. Consequently, in playing a Harsanyi-Nash equilibrium of a discounted repeated game of incomplete information about opponents' payoffs, players will eventually play according to an equilibrium of the real game as if they had complete information. A general self-correcting property of Bayesian updating is discussed.

PD January 1991. **TI** Private-Beliefs Equilibrium. **AU** Kalai, Ehud; Lehrer, Ehud. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 926; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 22. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** C71, D83. **KW** Repeated Games. Nash Equilibrium. Learning.

AB At a private-beliefs equilibrium of an n-person infinitely repeated game with discounting, each player maximizes his expected payoff relative to some private, possibly false, belief regarding the strategies chosen by his opponents. Moreover, the probability distribution induced over the observed play paths of the game according to his belief coincides with the one actually played. Thus, any statistical updating can only reinforce the beliefs. It is shown that if the game is played with perfect monitoring, then the joint behavior induced by a private-beliefs equilibrium coincides with a behavior induced by a Nash equilibrium even when perturbations are allowed.

Kamien, Morton I.

PD February 1991. **TI** Price Regulation and Quality of Service. **AU** Kamien, Morton I.; Vincent, Daniel R. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 920; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road,

Evanston, IL 60208. **PG** 28. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** L15, L51, D21, D43. **KW** Regulation. Prices. Firm Behavior. Product Quality.
AB Public concern has been rising about whether market forces are sufficient to ensure the optimal choice of quality of services. We examine a model in which unregulated competition leads to an underprovision of quality from a social perspective and then study the effects of price regulation. Although price floors sometimes have the expected effect of increasing the incentives to raise the quality of services, their imposition changes the nature of competitive behavior in subtle ways and often changes the relative positions of firms in the market. We show that no price floor exists which will achieve the socially optimal quality choice and the only price floors that result in symmetric firm behavior are those which involve an overinvestment in quality.

TI Integral Games: Theory and Applications. **AU** Fershtman, Chaim; Kamien, Morton I.; Muller, Eitan.

Kanaginis, George T.

PD February 1991. **TI** Fiscal Policy and Economic Activity in the Neoclassical Theory without Bequests. **AU** Kanaginis, George T.; Phelps, Edmund S. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 521; Department of Economics, Columbia University, New York, New York 10027. **PG** 27. **PR** $5.00. **JE** E24, E62. **KW** Fiscal Policy. General Equilibrium Model. Employment. Government Spending.
AB This paper studies the dynamic and steady-state effects of fiscal policy in a two sector general equilibrium model in which agents have finite horizons and there is full employment of the utility maximizing labor supply. An increased national debt, it is shown, contracts employment and raises the rate of interest. Higher government purchases of either good lead to an expansion of employment. Higher government purchases of the consumer good, which is capital intensive, stimulate investment despite a rise in the rate of interest and higher government purchases of the capital good, which is labor intensive, temporarily lead to a lower rate of interest, as has been observed during wartime periods. The model also implies that the employment expansion is consistent with either a lower or higher real wage, depending on the composition of demand.

Kaneko, Mamoui

PD July 1991. **TI** A Game Theoretical Approach to the International Debt Overhang. **AU** Kaneko, Mamoui; Prokop, Jacek. **AA** Kaneko: Virginia Polytechnic Institute and State University. Prokop: Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 945; Northwestern University, 2001 Sheridan Road, Evanston, IL 60208-2014. **PG** not available. **PR** $3.00 in the U.S. or Canada; $5.00 via international mail. **JE** F34, C72. **KW** International Debt. Foreign Debt. Internation Lending.
AB This paper considers an international financial problem of a sovereign country called debt overhang. The term "debt overhang" expresses the situation where a sovereign country has borrowed money from foreign banks and has been unable to fulfill the scheduled repayments for some period. We formulate this problem as a noncooperative game with n lender banks as players where each decides either to sell its loan exposure to the debtor country at the present price of debt on the secondary market, or to wait and keep its exposure. There are many pure and mixed strategy Nash equilibria in this game. However, we show that in any Nash equilibrium, the resulting secondary market price remains almost the same as the present price when the number of banks is large. We also obtain the comparative statics result that in a mixed strategy equilibrium, banks with smaller loan exposures have a greater tendency to sell than banks with larger loan exposure. In addition, we discuss the structure of the set of Nash equilibria.

Karp, Larry S.

PD July 1990. **TI** Why Industrial Policies Fail: Limited Commitment. **AU** Karp, Larry S.; Perloff, Jeffrey M. **AA** Karp: University of Southampton and University of California, Berkeley. Perloff: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 533; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 41. **PR** $8.20. **JE** F13, F14. **KW** Industrial Policies. Exports. Government Policy. Commercial Policy.
AB Government policies designed to give domestic exporters a strategic advantage in world markets are completely effective only if the government can commit to those policies for as long as they affect firm decisions. Export subsidies or other output policies that affect firms only in the current period could be used strategically without long-term commitments, but international agreements or fears of retaliation limit their use. The shorter the period of a government's commitment to an investment or industrial policy that affects firms for many periods, the less its strategic value because the government loses the "first mover" advantage it would have in a one-period market.

TI On the Existence and Optimality of Competitive Equilibria in Nonrenewable Resource Industries. **AU** Fisher, Anthony C.; Karp, Larry S.

PD February 1991. **TI** The Failure of Strategic Industrial Policies due to the Manipulation by Firms. **AU** Karp, Larry S.; Perloff, Jeffrey M. **AA** Karp: University of Southampton and University of California at Berkeley. Perloff: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 584; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 28. **PR** $5.60. **JE** F13, F21, F14, F41. **KW** Industrial Policy. Capital Mobility. Subsidies.
AB The home government announces an export subsidy before a home firm and a foreign rival compete in a third market. Anticipating the subsidy, either, home or foreign firms may increase their output-cost-savings investments. Anticipatory investments in either country may cause domestic welfare to fall below its free market level. Similarly, if both home and foreign governments use strategic industrial policies, welfare may fall in one or both countries.

PD April 1991. **TI** Legal Requirements that Artists Receive Resale Royalties. **AU** Karp, Larry S.; Perloff, Jeffrey M. **AA** Karp: University of California at Berkeley and University of Southampton. Perloff: University of California at Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 606; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA

94720. **PG** 23. **PR** $5.00. **JE** O31, O34, K40. **KW** Copyrights. Royalties.
AB Several times in the last few years, a guarantee that artists receive royalties whenever their works are resold has been debated in Congress; but, due to substantial opposition by some artists and others, Congress has not passed such a bill. The Visual Artists Rights Act of 1990, however, requires that a study be conducted by the Register of Copyrights in consultation with the Chair of the National Endowment for the Arts, on the feasibility of implementing: (A) a requirement that, after the first sale of a work of art, a royalty on any resale of the work, consisting of a percentage of the price, be paid to the author of the work; and (B) other possible requirements that would achieve the objective of allowing an author of a work of art to share monetarily in the enhanced value of that work. We believe that there are two key questions that such a study should answer. First, would artists or others benefit from artists receiving resale royalties? Second, should the government mandate such rights?.

Katz, Lawrence F.

PD January 1991. **TI** The Effect of the New Minimum Wage Law in a Low-Wage Labor Market. **AU** Katz, Lawrence F.; Krueger, Alan B. **AA** Katz: Harvard University and National Bureau of Economic Research. Krueger: Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 280; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 20. **PR** $2.00. **JE** J33, J21. **KW** Minimum Wage. Subminimum Wage. Fast Food Restaurants. Franchises.
AB After nearly a decade without change, legislation that affected the minimum wage in two significant ways took effect on April 1, 1990. First, the new legislation increased in hourly minimum wage from $3.35 to $3.80 on April 1, 1990, and will increase it again to $4.25 on April 1, 1991. Second, the legislation enables employers to pay a subminimum wage to teenage workers for up to six months. The recent amendments to the minimum wage law provide the basis for three topics examined in this paper. The first topic we investigate relates to the newly enacted youth subminimum. We provide the first estimates of the utilization of the subminimum wage. The second topic the effect of changes in the minimum wage on the wage structure. The final topic examined in this paper concerns nonwage offsets induced by the minimum wage.

PD March 1991. **TI** Changes in the Structure of Wages in the Public and Private Sectors. **AU** Katz, Lawrence F.; Krueger, Alan B. **AA** Katz: Harvard University and National Bureau of Economic Research. Krueger: Princeton University and National Bureau of Economic Research. **SR** Princeton Industrial Relations Section Working Paper: 282; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 58. **PR** $2.00. **JE** J31, J45. **KW** Wage Structure. Wages. Public Sector. Wage Differentials.
AB The wage structure in the U.S. public sector responded sluggishly to substantial changes in private sector wages during the 1970's and 1980's. Despite a large expansion in the college/high school wage differential during the 1980's in the private sector, the public sector college wage premium remained fairly stable. Although wage differentials by skill in the public sector were fairly unresponsive to changes in the private sector, overall pay levels for state and local government workers were quite sensitive to local labor market conditions. But federal government regional pay levels appear unaffected by local economic conditions. Several possible explanations are considered to account for the rigidity of the government internal wage structure, including employer size, unionization, and nonprofit status. None of these factors adequately explains the pay rigidity we observe in the government.

Keener, Robert W.

PD 1990. **TI** Estimation of the Covariance Matrix of the Least Squares Regression Coefficients When the Disturbance Covariance Matrix is of Unknown Form. **AU** Keener, Robert W.; Kmenta, Jan; Weber, Neville C. **AA** Keener and Kmenta: University of Michigan. Weber: University of Sydney. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 90-19; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 30. **PR** not available. **JE** C13, C51, C52. **KW** Autocorrelation. Heteroskedasticity. Asymptotic Theory. Ordinary Least Squares. Covariance Matrix.
AB This paper deals with the problem of estimating the covariance matrix of the least squares regression coefficients under heteroskedasticity and/or autocorrelation of unknown form. We consider an estimator proposed by White and give a relatively simple proof of its consistency. Our proof is based on more easily verifiable conditions than those of White. An alternative estimator with improved small sample properties is also presented.

Keil, Manfred W.

PD January 1991. **TI** An Aggregate Model of the Canadian Labor Market. **AU** Keil, Manfred W.; Symons, James. **AA** Keil: Concordia University, Montreal and Northeastern University. Symons: University College London and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 15; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 28. **PR** no charge. **JE** J41, E24, E32. **KW** Canada. Labor Market. Unemployment. Business Cycle. Economic Fluctuations.
AB The paper develops and estimates a small equilibrium model of the Canadian post-war labor market. The framework is imperfect competition in product and labor markets which, we argue, is forced upon us by the empirical fact that real wages do not on their own explain the business cycle. The framework incorporates on the supply side the effects of both unemployment benefits and the terms of trade. These variables, together with demand side effects (best measured, we argue, by the real interest rate), are then used to account for the path of Canadian unemployment. A pleasing feature of the model is that it is quite econometrically stable over the turbulent '80s.

Kelejian, Harry H.

PD March 1991. **TI** Rational Expectations: A Stochastic Generalization, Some Consequences, and an Inverse Result. **AA** University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-9; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 21. **PR** no charge. **JE** D84, C62. **KW** Rational Expectations. Variance Bounds.

AB Rational expectations are generalized to a stochastic framework. In this framework, it is shown that certain variance bounds restrictions need not hold. Other issues are also considered. These relate to the validity of concerning a posterior distribution that market agents use in making forecasts.

Kennelly, Brendan

PD April 1991. **TI** Fair and Equal Representation. **AU** Kennelly, Brendan; Mueller, Dennis C. **AA** Kennelly: University of Maryland, College Park and University College, Ireland. Mueller: University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-12; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 36. **PR** no charge. **JE** D72. **KW** Fair Representation. Voting Rights Act. Legislature.

AB Numerous cases challenging both state and local districting boundaries and the various electoral rules for choosing representatives at these levels have been brought under the Voting Rights Act by groups representing minorities. The numerous appeals and reversals that characterize legislation in this area indicate that the courts have yet to arrive at a set of definitions that provides clear guidance (a) to the bodies that craft electoral rules and draw boundaries, or (b) to the groups that challenge them. Given the success minority groups have had in challenging jurisdictional boundaries and electoral rules when they have not been represented in proportion to their numbers in the population, and the likelihood of a challenge being turned down when they are, we anticipate a growing tendency to interpret fair or equal representation as requiring proportional representation. The purpose of this article is to explore the implications of this interpretation.

Kessides, Ioannis N.

TI Living by the "Golden Rule": Multimarket Contact in the U.S. Airline Industry. **AU** Evans, William N.; Kessides, Ioannis N.

Kiyotaki, Nobuhiro

TI Toward a Theory of International Currency. **AU** Matsuyama, Kiminori; Kiyotaki, Nobuhiro; Matsui, Akihiko.

Klein, Martin

PD July 1991. **TI** Bargaining for the Choice of Monetary Policy Instruments in a Simple Stochastic Macro Model. **AA** Klein: Department of Economics, Universitat Bonn. **SR** CEPR Discussion Paper: 553; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 24. **PR** Pounds 3.00 or $5.00. **JE** 026, 431, 432. **KW** Exchange Rates. Monetary Union. Policy Coordination. Bargaining.

AB This paper focuses on two questions. First, under what conditions would two countries agree to hold their bilateral cross exchange rate fixed? and second, what allocation of intervention duties would this require? Answers to these questions are sought by combining a standard macroeconomic model of an open economy with the solution concepts of fixed-threat bargaining games. It is shown that for reasonable parameter values the core of the bargaining game implied by this set-up is non-empty, so that an agreed-upon and mutually beneficial allocation of intervention duties exists. Conditions for the non-emptiness of the core as well as the properties of the Nash solution are discussed and the results are used to characterize the difference between a monetary union and a fixed exchange rate regime. It is argued that a fixed exchange rate system in which the bargaining solution requires an asymmetric allocation of intervention duties cannot be an intermediate phase in the transition towards a monetary union.

Kletzer, Kenneth M.

TI Persistent Differences in National Productivity Growth Rates with a Common Technology and Free Capital Mobility. **AU** Buiter, Willem H.; Kletzer, Kenneth M.

Kmenta, Jan

TI Estimation of the Covariance Matrix of the Least Squares Regression Coefficients When the Disturbance Covariance Matrix is of Unknown Form. **AU** Keener, Robert W.; Kmenta, Jan; Weber, Neville C.

TI Multiple Minima in the Estimation of Models with Autoregressive Disturbances. **AU** Doran, Howard; Kmenta, Jan.

Knack, Stephen

PD April 1991. **TI** The Voter Participation Effects of Selecting Jurors from Registration Lists. **AA** University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-10; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 41. **PR** no charge. **JE** D72, K40. **KW** Legal System. Voting. Jury.

AB This study examines the deterrent impact on voter participation rates of using voter registration lists for juror selection purposes. Controlling for other variables influencing registration and turnout, it is found that among American National Elections Studies survey respondents, residence in jurisdictions employing registration lists for juror selection decreased the likelihood of being registered to vote in 1988 by about 12 percentage points, and lowered the probability of actually voting in the 1988 national elections by about 8 percentage points. It is estimated that eliminating the use of registration lists for juror selection would increase presidential voting by about 7 percentage points, more than compensating for the entire post-1972 decline in presidential turnout.

Kodres, Laura E.

PD February 1991. **TI** The Existence of Pareto Superior Price Limits and Trading Halts. **AU** Kodres, Laura E.; O'Brien, Daniel P. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 91-5; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 20. **PR** not available. **JE** G12, G13. **KW** Asset Pricing. Stock Market. Futures Market.

AB We examine the welfare effects of price limits and trading halts in a linear mean-variance model of stock and futures trading. We suppose that shocks to liquidity and fundamentals occur between the time investors decide to trade and the time their orders are executed and cannot be insured with contingent claims. This gives rise to implementation risk that is not transferred optimally among investors. Price limits (or price contingent trading halts) serve to partially insure

implementation risk. We show that when price fluctuations are due solely to news about fundamentals, judiciously chosen price limits are (ex ante) Pareto superior to unconstrained trade. When liquidity shocks are large, then some speculators lose, but hedgers still benefit from price limits.

Kokkelenberg, Edward C.

TI Measuring Total Factor Productivity, Technical Change and the Rate of Returns to Research and Development. **AU** Nguyen, Sang V.; Kokkelenberg, Edward C.

Kolstad, Charles

TI Demand for Energy and Nonfuel Minerals: Final, Derived, and Speculative. **AU** Slade, Margaret E.; Kolstad, Charles; Weiner, Robert.

Kramarz, F.

PD December 1990. **TI** Reference and Time Generate Tacit Cooperation in Hierarchical Relationship. **AU** Kramarz, F.; Ponssard, J.P. **AA** Kramarz: INSEE. Ponssard: CNRS. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9019; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 22. **PR** no charge. **JE** C71, D73, D83. **KW** Repeated Game. Hierarchy. Cooperative Game. Moral Hazard. Common Knowledge.

AB This paper provides a game theoretic rationale for the use of references in hierarchies. It proves that the common knowledge of a standard of behavior in a long-term relationship generates tacit cooperation in spite of the existence of moral hazard and adverse selection.

Kraus, Alan

TI Efficient Financing under Asymmetric Information. **AU** Brennan, Michael J.; Kraus, Alan.

Krueger, Alan B.

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

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

Kuester, Kathleen A.

PD January 1991. **TI** Market-Based Deposit Insurance Premiums: An Evaluation. **AU** Kuester, Kathleen A.; O'Brien, James M. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 150; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 26. **PR** no charge. **JE** G21, G28. **KW** Deposit Insurance. Commercial Banks. Banking. Banking Reforms. Government Policy.

AB Risk adjusted deposit insurance premiums have been among deposit insurance reforms considered by economists and policy-makers. This paper evaluates the use of option pricing methods, used in a number of studies, to set stock market-based, risk adjusted deposit insurance premiums, and more generally, to identify banks by their riskiness. The paper points out potential biases in the approach, and it empirically tests the ability of the option measures to distinguish banks by risk. The results demonstrate that the equity market measures are sensitive to contemporaneous accounting information and have predictive power for future bank performance, but that the market measures do not contain all the information conveyed by accounting data. Thus, the results do not make a convincing case for exclusive use of this methodology to set risk adjusted insurance premiums. They suggest, however, that market and accounting information may be useful jointly in identifying risky banks.

Kuran, Timur

PD July 1989. **TI** Private and Public Preferences. **AA** University of Southern California. **SR** University of Southern California Modelling Research Group Working Paper: M8912; Department of Economics, University of Southern California, University Park, Los Angeles, CA 90089-0152. **PG** 32. **PR** not available. **JE** D11, B21, D71. **KW** Individual Choice. Utility Theory. Preferences. Decision Theory.

AB A framework is developed for analyzing individual choice, which explicitly recognizes the multiplicity of human motivations. Three sources of utility are identified: the available options, the social sanctions brought about by one's decisions concerning these options, and one's decisional autonomy. These potentially conflicting determinants of utility generate two distinct individual preferences: private and public. The framework is contrasted with other conceptions of a divided self, and it is used to illuminate why some decisions are made collectively while others are left to individuals. The paper challenges the theory of revealed preference, a cornerstone of the neoclassical economic method.

PD August 1989. **TI** The Role of Deception in Political Competition. **AA** University of Southern California. **SR** University of Southern California Modelling Research Group Working Paper: M8915; Department of Economics, University of Southern California, University Park, Los Angeles, CA 90089-0152. **PG** 31. **PR** not available. **JE** D72. **KW** Political Processes. Special Interest Groups. Political Economics.

AB In its group-centered formulation the economic theory of politics recognizes that the distortion of information figures prominently in the arsenals of organized interest groups. This paper builds a case for according equal significance to informational distortions perpetrated by ordinary individuals. Preference falsification on the part of individuals distorts not only the process of political choice, but also the evolution of the beliefs that underlie people's political dispositions. Organized groups know that preference falsification is a feature of individual political behavior, and by various means they try to exploit it.

Kwiatkowski, Denis

PD May 1991. **TI** Testing the Null Hypothesis of Stationarity Against the Alternative of a Unit Root: How Sure are We that Economic Time Series have a Unit Root? **AU** Kwiatkowski, Denis; Phillips, Peter C. B.; Schmidt, Peter. **AA** Kwiatkowski: Central Michigan University. Phillips: Yale University. Schmidt: Michigan State University. **SR** Yale Cowles Foundation Discussion Paper: 979; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 23. **PR** $2.00. **JE** C12, C52. **KW** Unit Root. Time Series. Stationarity. Hypothesis Testing.

AB The standard conclusion that is drawn from this empirical evidence is that many or most aggregate economic time series

contain a unit root. However, it is important to note that in this empirical work the unit root is set up as the null hypothesis testing is carried out ensures that the null hypothesis is accepted unless there is strong evidence against it. Therefore, an alternative explanation for the common failure to reject a unit root is simply that most economic time series are not very informative about whether or not there is a unit root; or, equivalently, that standard unit root tests are not very powerful against relevant alternatives.

Labadie, Pamela A.

PD April 1991. **TI** The Term Structure of Interest Rates over the Business Cycle. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 159; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 41. **PR** no charge. **JE** E43, E32, E44, G12, E47. **KW** Yield Curve. Business Cycle. Asset Pricing Model. Bonds.

AB The behavior of the yield curve over the business cycle is studied for two types of economies: stationary in the levels of output and money and stationary in the growth rates of output and money. The yield curves behave very differently in the two economies; for example, at the top of the business cycle, the yield spread for indexed discount bonds is procyclical in the (level) stationary economy while it is countercyclical in the growing economy. The behavior of the yield curve over the cycle is linked to the forward premium, one period holding return premium, and asset riskiness. The framework is the standard asset pricing model with money introduced via a cash-in-advance constraint.

Laffont, Jean-Jacques

PD June 1990. **TI** Privatization and Incentives. **AU** Laffont, Jean-Jacques; Tirole, Jean. **AA** Laffont: Universite de Toulouse. Tirole: Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology Department of Economics Working Paper: 572; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 25. **PR** $6.00 Domestic, $8.00 Overseas, $2.00 Student. **JE** L33, L32. **KW** Privatization. Public Enterprise.

AB The paper compares the incentives of a public enterprise with those of a private regulated firm. It first discusses some potential differences between the two ownership structures and then sets up a formal model based on the allocation of residual rights of control. In this model, the benefit of privatization is that private ownership generates some similarities between the owners' objectives and managerial rewards, and thereby limits the expropriation of the firm's investments for non-profit purposes. The cost of privatization is that it creates a multi-master situation in which managers must respond to the conflicting demands of government and private shareholders.

PD December 1990. **TI** Cost Padding, Auditing and Collusion. **AU** Laffont, Jean-Jacques; Tirole, Jean. **AA** Laffont: Universite de Toulouse. Tirole: Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology Department of Economics Working Paper: 571; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 29. **PR** $6.00 Domestic, $8.00 Overseas, $2.00 Student. **JE** H57, L51, L33, L21. **KW** Auditing. Collusion. Procurement. Regulation.

AB This paper first studies how cost padding, auditing and collusion with auditors affect the power of incentive schemes in procurement regulation. Unaudited cost padding requires fixed price contracts. Incentive schemes are more powerful under imperfect auditing than under perfect auditing and less powerful than under no auditing. The effect of collusion in auditing on the optimal power of incentive schemes is ambiguous; high-powered schemes reduce the incentive for cost padding and thus are less affected by collusion; however, they also yield higher rents and therefore make firms more willing to prevent release of evidence of cost padding. Monitoring of effort, the second topic of this paper, is a substitute for the use of low-powered incentive schemes to extract the informational rents. It thus enables the regulator to afford more powerful incentive schemes. Collusion in auditing unambiguously lowers the power of incentive schemes.

Laitner, John

PD October 1990. **TI** Marriage and Neutrality. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 90-13; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 21. **PR** not available. **JE** J12, D91. **KW** Marriage. Ricardian Equivalence. Altruism.

AB This paper examines the relation of marital connections among family lines and Ricardian neutrality. Recent work by Bernheim and Bagwell implies that marriage will vastly expand the scope of neutrality results, and also generate complications (stemming from free riding) for the existence of equilibria, with universally functioning intertemporal linkages, in the first place. The present paper amends a model with intertemporal altruism and marriage to include a description of how people choose their spouses. The parental transfer, or potential transfer, accruing to a prospective spouse is an element in the marital decision. We consider several different institutional arrangements. Assortative mating always leads away from Bernheim and Bagwell's extreme neutrality results, and it alleviates free riding problems. In fact, the analysis of this paper suggests that we can find a solution to our model ignoring marriage altogether and then interpret the same solution as a Nash equilibrium after reintroducing marriage.

Lal, Mohan

PD March 1986. **TI** Performance Evaluation of Nonprofit Social Service Organizations: Replication and Extensions. **AA** University of California, Los Angeles and University of Otago. **SR** University of California at Los Angeles Anderson Graduate School of Management Accounting Working Paper: 86-1; Anderson Graduate School of Management, University of California, Los Angeles, CA 90024-1481. **PG** 37. **PR** $2.00; checks payable to UC Regents. **JE** L31, M41. **KW** Nonprofit Institutions. Accounting.

AB This paper reports a study carried out in Dunedin, New Zealand to explore further the trends in the evaluation of nonprofit social service organizations. The results obtained differ in a number of respects from those obtained in an earlier study carried out in the United States. They indicate that any particular system of performance evaluation must make allowance for the size, available manpower, budget, access to the services of other organization and the particular type of service(s) offered.

Lam, David

TI The Effects of Cohort Size on Marriage Markets in Twentieth Century Sweden. **AU** Bergstrom, Ted; Lam, David.

Landesman, Wayne

TI Cross Sectional Regularities in the Response of Stock Prices to Bond Rating Changes. **AU** Cornell, Bradford; Landesman, Wayne; Shapiro, Alan C.

Landsman, Wayne R.

PD November 1986. **TI** Cross-Sectional Capital Market Research and Model Specification. **AU** Landsman, Wayne R.; Magliolo, Jody. **AA** Landsman: University of California, Los Angeles. Magliolo: Carnegie Mellon University. **SR** University of California at Los Angeles Anderson Graduate School of Management Accounting Working Paper: 86-8; Anderson Graduate School of Management, University of California, Los Angeles, CA 90024-1481. **PG** 14. **PR** $2.00; checks payable to UC Regents. **JE** G12, M41. **KW** Accounting. Securities. Financial Markets. Capital Market.

AB Capital market researchers often attempt to determine whether specific attributes (e.g., earnings) of a firm (or set of firms) are "priced" in the financial markets. Specific empirical hypotheses are proposed and then "tested". In their seminal paper, Ball and Brown [1968] examine whether changes in residual security returns, determined from the market model (see Fama [1976]) are correlated with changes in accounting earnings. One can interpret their research as attempting to determine if "unexpected" changes in accounting earnings make up a "factor" explaining unexpected changes in security prices. The purpose of our study is twofold. First, we argue that the issue of appropriateness of econometric specification (levels or changes) is unresolvable given the current state of capital market research. Second, we argue that the econometric specification issue is actually a subset of a larger set of issues. In particular, the functional form of an empirical test examining whether a firm specific attribute determines security prices is dictated by two sets of assumptions.

Lane, Sylvia

PD March 1991. **TI** Food Safety: Consumer Concerns and Consumer Behavior. **AU** Lane, Sylvia; Bruhn, Christine G. **AA** Lane: University of California, Berkeley and University of California, Davis. Bruhn: University of California, Davis. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 593; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 15. **PR** $5.00. **JE** Q18, D18. **KW** Agriculture. Consumer Protection. Consumption.

AB When asked, many consumers express concern about food safety, yet relatively few consumers appear to be altering their food-buying behavior in view of their concerns.

Lang, William W.

PD January 1991. **TI** Housing Appraisals and Redlining. **AU** Lang, William W.; Nakamura, Leonard I. **AA** Lang: Rutgers University. Nakamura: Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 91-3; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 26. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** G21, R21, R31. **KW** Mortgages. Housing. Real Estate. Urban Economics.

AB We develop a model of a mortgage market which captures the dynamic information gathering which is implied by the use of home appraisals. In our model, the precision of appraisals depends on the quantity of previous home sales. In turn, the precision of appraisals influences current home sales, since when appraisals are inaccurate, lenders require larger down payments. There is thus a dynamic information externality in which past purchases influence current purchases. As a consequence, differential mortgage lending behavior will be sub-optimal, and the appearance of redlining may be justifiably subject to corrective action.

Laskar, Daniel

PD March 1990. **TI** The Role of a Fixed Exchange Rate System When Central Bankers are Independent. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9011; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 20. **PR** 20 F. **JE** E42, E58, F15, F33. **KW** Exchange Rate. Monetary Union. International Policy. Central Banks. Policy Coordination.

AB It has been emphasized that, in a symmetric model, a fixed exchange rate system allows us to reach the cooperative solution in the game between central bankers. However, as cooperation can be counterproductive, such a property may actually not be favorable. In this paper we reconsider this issue by introducing independent central bankers who need not share the social preferences. We show that cooperation between central bankers becomes neither productive nor counterproductive. Consequently, a fixed exchange rate system is preferred to a flexible one because it eliminates the inefficiency created by the lack of international cooperation in the choices made by countries of the central bankers themselves.

Le Breton, Michel

PD March 1991. **TI** Social Choice with Analytic Preferences. **AU** Le Breton, Michel; Weymark, John A. **AA** Le Breton: GREQE and Universite Aix-Marseille. Weymark: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-10; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 24. **PR** not available. **JE** D71. **KW** Social Choice. Preferences.

AB This article studies social choice correspondence versions of Arrow's Theorem in which natural economic and political restrictions are placed on preferences and feasible sets. The universal set of alternatives is the nonnegative orthant in a Euclidean space, preferences are assumed to be monotone (with no critical points) and analytic in the economic problem and spatial in the political problem, and feasible sets are assumed to be compact with nonempty interiors. We demonstrate that social choice correspondences exist which satisfy Arrow's Choice Axiom, Independence of Infeasible Alternatives, Strong Pareto, and Anonymity on such domains. To help establish the economic result, we develop an ordinal version of the Analytic Continuation Principle.

PD August 1991. **TI** An Introduction to Arrovian Social Welfare Functions on Economic and Political Domains.

AU Le Breton, Michel; Weymark, John A. **AA** Le Breton: GREQE, Marseille. Weymark: University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-28; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 69. **PR** not available. **JE** D71. **KW** Social Choice. Social Welfare Functions.

AB This article provides an introduction to the literature which develops sufficient conditions for domains of individual preferences to be Arrow-inconsistent. A preference domain is Arrow-inconsistent if it is not possible for a social welfare function to satisfy all of Arrow's axioms on this domain. Particular emphasis is given to the domain conditions introduced by Kalai, Muller, and Satterthwaite for public alternatives and by Bordes and Le Breton for private alternatives. A number of examples of economic and political preference domains which satisfy their conditions are considered. Examples of domains for which all of Arrow's axioms can be satisfied are also considered.

Leborgne, Daniele

PD March 1990. **TI** Fallacies and Open Issues about Post-Fordism. **AU** Leborgne, Daniele; Lipietz, Alain. **AA** CEPREMAP. **SR** CEPREMAP Discussion Paper: 9009; CEPREMAP, 142 rue du Chevaleret, 75013 Paris, FRANCE. **PG** 36. **PR** 20 F. **JE** J53, O15. **KW** Economic Development. Labor Relations.

AB This paper discusses some open issues and misunderstandings in the debate about the new emerging models of development. A model of development is not only a technological paradigm. There is not a single way out of the crisis of Fordist labor relations. "Flexibility" and "craft" could not be mixed a la carte. Industrial organization is also an open issue. Macroeconomics still matters, and ecology matters more and more. Moreover, there is no reason why a single model of development should be world-hegemonic. "After-Fordism" may not see the victory of one of the conflicting models (now developing in dotted lines, and here labeled "Post-Fordism" and "Neo-Fordism"), but a "core-periphery" typecasting of models.

Lebow, David E.

PD February 1991. **TI** Import Competition and Wages: The Role of the Nontradable Goods Sector. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Economic Activity Section Working Paper Series: 115; Board of Governors of the Federal Reserve System, Economic Activity Section, Stop #80, Federal Reserve Board, Washington, D.C. 20551. **PG** 15. **PR** no charge. **JE** J31, F11, L60. **KW** Imports. Exchange Rate. Wages. Manufacturing.

AB The paper highlights the role of the nontradable goods sector to reconcile the results of those investigators who have found a significant effect of import competition on wages in manufacturing, with those who have found no such effect in the aggregate. The model demonstrates that a fall in the relative price of tradable goods (for example, as the result of a strengthening dollar) has an ambiguous effect on aggregate real wages. The reason is that, while the lower price of tradable goods leads to a decrease in labor demand in the tradable sector, it also leads to an increase in labor demand in the nontradable sector. Empirical results show considerable support for the model when tradable goods prices are measured by import or export prices. In contrast, however, the paper found no support for the model when tradable goods prices are measured by the real exchange rate.

Lebrun, Bernard

PD May 1991. **TI** Asymmetry in Auctions and Competition between Groups, A Discrete Model. **AA** Virginia Polytechnic Institute and State University. **SR** Virginia Polytechnic Institute and State University Working Paper in Economics: E-91-05-02; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061. **PG** 98. **PR** free by request. **JE** D44. **KW** Auctions. Nash Equilibrium.

AB We study the Nash equilibria of the first price and the second price auctions with two bidders whose reservation values are determined by independent probability distributions with the same discrete support but which are not identical contrarily to what is assumed usually. The existence, the question of uniqueness, the computation and some properties of Nash equilibria are examined when at most three reservation values are possible and where a minimum price is implemented. The first price and second price auctions are compared from the auctioneer's point of view. We apply the results to the case concerning the special structure of asymmetry arising from N identical individual buyers pooling together into two groups of sizes n and (N-n).

Lee, Lung-Fei

PD May 1991. **TI** Amemiya's Generalized Least Squares and Tests of Overidentification in Simultaneous Equation Models with Qualitative or Limited Dependent Variables. **AA** University of Minnesota. **SR** University of Minnesota Center for Economic Research Discussion Paper: 262; Department of Economics, 1035 Management and Economics, University of Minnesota, Minneapolis, MN 55455. **PG** 12. **PR** free. **JE** C34, C12, C52. **KW** Simultaneous Equation Models. Limited Dependent Variables. Identification Tests. Identification.

AB Amemiya's generalized least squares method for the estimation of simultaneous equation models with qualitative or limited dependent variables is known to be efficient relative to many popular two-stage estimators. This note points out that test statistics for overidentification restrictions can be obtained as by-products of Amemiya's generalized least squares procedure. Amemiya's procedure is shown to be a minimum chi-square method. The Amemiya procedure is valuable both for efficient estimation and for model evaluation of such models.

PD June 1991. **TI** Semiparametric Instrumental Variable Estimation of Simultaneous Equation Selection Models. **AA** University of Minnesota. **SR** University of Minnesota Center for Economic Research Discussion Paper: 263; Department of Economics, 1035 Management and Economics, University of Minnesota, Minneapolis, MN 55455. **PG** 42. **PR** free. **JE** C31, C14, C51. **KW** Semiparametric Model. Sample Selection. Identification. Instrumental Variables. Simultaneous Equations.

AB The identification and estimation of a semiparametric simultaneous equation model with selectivity have been considered. The identification of structural parameters from reduced form parameters in the semiparametric model requires stronger conditions than the usual rank condition in the classical simultaneous equation model or the parametric

simultaneous equation sample selection model. The necessary order condition for identification in the semiparametric model corresponds to the over-identification condition in the classical model. Semiparametric two-stage estimation methods which generalize the two-stage least squares method and the generalized least squares estimator is shown to be asymptotically efficient in a class of semiparametric instrumental variable estimators.

Leff, Nathaniel H.

PD December 1990. **TI** Direct Foreign Investment, Multinational Corporations, and the Developing Countries: Risks, Returns and Deceleration. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-90-233; First Boston Series, Columbia University, New York, NY 10027. **PG** 49. **PR** not available. **JE** F21, F23, O57. **KW** Developing Countries. Foreign Investment. Multinational Firms. Government Policy.

AB This paper analyzes recent features of direct foreign investment to the developing countries: quantitative magnitudes of gross and net flows; changes in source and host countries; changes in sectoral allocations; changes in risks and returns. The paper also presents a conceptual framework for analyzing interactions between governments and multinational corporations in the developing countries. The conceptual framework is then applied to analyze policy choices for a developing country that would like to maximize the net positive impact of direct foreign investment in its development.

Lehrer, Ehud

TI Global Games. **AU** Gilboa, Itzhak; Lehrer, Ehud.

TI Rational Learning Leads to Nash Equilibrium (A New Extended Version). **AU** Kalai, Ehud; Lehrer, Ehud.

TI Private-Beliefs Equilibrium. **AU** Kalai, Ehud; Lehrer, Ehud.

Lemgruber, Eduardo F.

TI Corporate Spinoffs: Multiple Announcement and Ex-Date Abnormal Performance. **AU** Copeland, Thomas E.; Lemgruber, Eduardo F.; Mayers, David.

Lempinen, Urho

TI Precautionary Saving, Government Policy and Growth in a Stochastic Cash-in-Advance Economy. **AU** Honkapohja, Seppo; Lempinen, Urho.

Levine, David K.

TI Self-Confirming Equilibrium. **AU** Fudenberg, Drew; Levine, David K.

Levine, Phillip B.

PD May 1991. **TI** Spillover Effects between the Insured and Uninsured Unemployed. **AA** Princeton University. **SR** Princeton Industrial Relations Section Working Paper: 283; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 71. **PR** $2.00. **JE** J64, J65. **KW** Unemployment Insurance. Unemployment.

AB In this paper, I consider the effect of changing the level of unemployment insurance (UI) benefits on workers who do not receive UI. I hypothesize that a spillover effect between insured and uninsured workers exists so that an increase in the UI benefits, which leads to longer durations of unemployment for insured workers, will lead to a reduction in the duration of unemployment for the uninsured. This prediction is tested using data from several March Current Population Surveys and the National Longitudinal Survey of Youth. In both samples I find that an increase in UI benefits leads to a reduction in the duration of unemployment for uninsured workers. Furthermore, using several years of state level data, I show that the estimated effect on unemployment for the entire labor force is roughly zero when I allow for the spillover effect.

Levy, Amnon

TI Human Resource Intensive Strategies in Developing Economies. **AU** Adelman, Irma; Levy, Amnon.

Lewis, Jeffrey D.

TI Policy Lessons from Two-Sector Models. **AU** Devarajan, Shantayanan; Lewis, Jeffrey D.; Robinson, Sherman.

Lichtenstein, Z.

TI Linear and Nonlinear Associative Memories for Parameter Estimation. **AU** Kalaba, Robert; Lichtenstein, Z.; Simchony, T.; Tesfatsion, Leigh.

Lin, Shoukang

TI Terms of Trade, Interest Rates and Current Account Dynamics. **AU** Galor, Oded; Lin, Shoukang.

Lindbeck, Assar

PD April 1991. **TI** Segmented Labor Markets and Unemployment. **AU** Lindbeck, Assar; Snower, Dennis J. **AA** Lindbeck: Institute for International Economic Studies, Stockholm. Snower: Department of Economics, Birkbeck College, London. **SR** CEPR Discussion Paper: 523; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 35. **PR** Pounds 3.00 or $5.00. **JE** 130, 320, 820, 830, 850. **KW** Segmented Labor Markets. Unemployment.

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

TI The Interaction of Monetary Policy and Wages. **AU** Gylfason, Thorvaldur; Lindbeck, Assar.

Lipietz, Alain

TI Fallacies and Open Issues about Post-Fordism. **AU** Leborgne, Daniele; Lipietz, Alain.

Liu, Jianmin

TI Import Demand for Canned Peaches, Pears, and Tomato

Products. **AU** Moulton, Kirby; Liu, Jianmin.

Love, H. Alan

PD May 1990. **TI** Policy Preference Functions: Grand Themes and New Directions. **AU** Love, H. Alan; Rausser, Gordon C.;Burton, Diana M. **AA** Love: Oregon State University. Rausser and Burton: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 571; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 45. **PR** $9.00. **JE** D71, D72, D78. **KW** Public Policy. Political Economy. Economic Policy. Preferences.

AB Policy preference functions (PPFs) explicate trade-offs among various political economic groups concerned with the policy process. Estimation methods for PPFs are detailed. The stochastic nature of PPF parameters is discussed and a method for developing standard errors is introduced. Hypothesis testing and model validation techniques are also covered.

Lutz, Nancy A.

TI Dual Distribution in Franchising. **AU** Gallini, Nancy T.; Lutz, Nancy A.

Lyons, Richard K.

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

MacKie-Mason, Jeffrey K.

PD April 1991. **TI** Taxes and the Choice of Organizational Form. **AU** MacKie-Mason, Jeffrey K.; Gordon, Roger H. **AA** MacKie-Mason: University of Michigan, National Bureau of Economic Research and Stanford University. Gordon: University of Michigan and National Bureau of Economic Research. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 91-9; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 28. **PR** not available. **JE** H25, L11, M14, G32. **KW** Taxation. Corporations. Business Economics. Industrial Organization.

AB One of the most basic distortions created by the double taxation of corporate income is the disincentive to incorporate. In this paper, we investigate the extent to which the aggregate allocation of assets and taxable income in the U.S. between corporate vs. noncorporate forms of organization during the period 1959-86 has responded to the size of the tax distortion discouraging firms from incorporating. In theory, profitable firms should shift out of the corporate sector when the tax distortion to incorporating is larger, and conversely for firms with tax losses. We also estimate the extent to which easing of the conditions firms must satisfy to acquire sub-chapter S status has increased the amount of activity organized as sub-chapter S corporations. Our empirical results provide strong support for the theoretical forecasts, and hold consistently across a wide variety of specifications and measures of the tax variables. Measured effects are small, however, throwing doubt on the economic importance of tax-induced changes in organizational form.

TI Peak-Load Pricing-With and Without Constrained Rate of Return. **AU** Bergstrom, Ted; MacKie-Mason, Jeffrey K.

Madhavan, Ananth

TI Dynamic Insider Trading. **AU** Dutta, Prajit K.; Madhavan, Ananth.

Magliolo, Jody

TI Cross-Sectional Capital Market Research and Model Specification. **AU** Landsman, Wayne R.; Magliolo, Jody.

Mailath, George J.

PD March 1991. **TI** Extensive Form Reasoning in Normal Form Games. **AU** Mailath, George J.; Samuelson, Larry; Swinkels, Jeroen. **AA** Mailath: University of Pennsylvania. Samuelson: Tilberg University and University of Wisconsin. Swinkels: Stanford University. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 90-01R; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 31. **PR** no charge. **JE** C72, C71, D83. **KW** Game Theory. Sequential Equilibrium. Information Set.

AB Different extensive form games with the same reduced normal form can have different information sets and subgames. This generates a tension between a belief in the strategic relevance of information sets and subgames and a belief in the sufficiency of the reduced normal form. We identify a property of extensive form information sets and subgames which we term strategic independence. We show that strategic independence is captured by the reduced normal form, and can be used to define normal form information sets and subgames. We prove a close relationship between these normal form structures and their extensive form namesakes. Using these structures, we are able to motivate and implement solution concepts corresponding to subgame perfection, sequential equilibrium, and forward induction entirely in the reduced normal form.

Majumdar, Mukul

TI Limit Integration Theorems for Monotone Functions with Applications to Dynamic Programming. **AU** Dutta, Prajit K.; Majumdar, Mukul.

TI On the Parametric Continuity of Dynamic Programming Problems. **AU** Dutta, Prajit K.; Majumdar, Mukul; Sundaram, Raghu.

Maksimovic, Vojislay

TI Vendor Financing. **AU** Brennan, Michael J.; Maksimovic, Vojislay; Zechner, Josef.

Manning, Alan

PD April 1991. **TI** Multiple Equilibria in the British Labour Market: Some Empirical Evidence. **AA** Manning: Department of Economics, London School of Economics. **SR** CEPR Discussion Paper: 540; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 49. **PR** Pounds 3.00 or $5.00. **JE** 023, 824. **KW** Unemployment. Multiple Equilibria. Imperfect Competition.

AB This paper constructs a simple, imperfectly competitive macro model which may have single or multiple equilibria depending on whether there are constant or increasing returns to scale in production. The model can be estimated and so can

be used not only to test multiple versus single equilibrium models, but also to test whether multiple equilibrium models are capable of explaining the observed behaviour of unemployment. The model is estimated for the British economy for the period 1951-87. Some evidence for multiple equilibria is found and using such a model suggests that the rise in unemployment in Britain in the 1980s is best understood as a move from a low- to a high-equilibrium unemployment rate. Although the multiple equilibrium model does perform better than a single equilibrium model, however, the difference is not very significant so that there must remain considerable uncertainty about this issue.

Marquez, Jaime

PD May 1991. **TI** The Econometrics of Elasticities or the Elasticity of Econometrics: An Empirical Analysis of the Behavior of U.S. Imports. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Papers: 396; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 44. **PR** no charge. **JE** F14, F17, F32. **KW** Imports. Trade Model. International Trade.

AB Fifty years of econometric modeling of U.S. import demand assumes that trade elasticities are autonomous parameters, that both cross-price effects and simultaneity biases are absent, and that expenditures on domestic and foreign goods can be studied independently of each other. To relax these assumptions, the paper assembles a simultaneous model explaining bilateral U.S. import volumes and prices. Spending behaves according to the Rotterdam model which, by design, embodies all of the properties of utility maximization and does not treat trade elasticities as autonomous parameters. Pricing behaves according to the pricing-to-market hypothesis which recognizes exporters' incentives to discriminate across export markets. Parameter estimation relies on the Full Information Maximum Likelihood approach and uses bilateral price data for 1965-1987. According to the evidence, treating trade elasticities as autonomous parameters and ignoring the statistical implications of simultaneity and optimization impart significant biases to the structural estimates and undermine our effectiveness in addressing questions relevant to economic interactions among nations.

Matsui, Akihiko

PD March 1991. **TI** The Roles of Public Information and Preplay Communication in Evolutionary Games. **AU** Matsui, Akihiko; Rob, Rafael. **AA** University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 91-10; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 38. **PR** no charge. **JE** C73, C70. **KW** Stochastic Games. Coordination Problem. Communication. Game Theory.

AB We consider a society in which finitely many individuals are randomly matched to play a two-person game of common interest with two Pareto-ranked strict Nash equilibria. At the end of each period, after each of them is matched infinitely many times, players die stochastically and are replaced by newborns. Each newborn inherits his/her parent information and takes with positive probability any strategy which could be optimal under some belief consistent with the information possessed. If he/she knows the number of deaths, a coordination problem arises, but in the long-run, the society hits the risk-dominant Nash equilibrium most of the time if the rate of death is sufficiently small. If, on the other hand, he/she does not know the number of deaths, but exchange of messages, or preplay communication, is available, then the society is eventually absorbed into the Pareto-superior equilibrium.

TI Toward a Theory of International Currency. **AU** Matsuyama, Kiminori; Kiyotaki, Nobuhiro; Matsui, Akihiko.

Matsuyama, Kiminori

PD April 1991. **TI** Toward a Theory of International Currency. **AU** Matsuyama, Kiminori; Kiyotaki, Nobuhiro; Matsui, Akihiko. **AA** Matsuyama: Northwestern University. Kiyotaki: London School of Economics and University of Wisconsin. Matsui: University of Pennsylvania. **SR** University of Pennsylvania Center for Analytic Research in Economics and the Social Sciences (CARESS) Working Paper: 91-11; University of Pennsylvania, Center for Analytic Research in Economics and the Social Sciences, McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6297. **PG** 49. **PR** no charge. **JE** F33, F11, F41. **KW** Currency. International Currency. Trade Model. Financial Integration.

AB Our goal is to provide a theoretical framework in which both positive and normative aspects of international currency can be addressed in a systematic way. To this end, we use the framework of random matching games and develop a two country model of the world economy, in which two national fiat currencies compete and may be circulated as media of exchange. There are multiple equilibria, which differ in the areas of circulation of the two currencies. In one equilibrium, the two national currencies are circulated only locally. In another, one of the national currencies is circulated as an international currency. There is also an equilibrium in which both currencies are accepted internationally.

PD June 1991. **TI** Custom versus Fashion: Hysteresis and Limit Cycles in a Random Matching Game. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 940; Northwestern University, 2001 Sheridan Road, Evanston, IL 60208-2014. **PG** 26. **PR** $3.00 in the U.S. or Canada; $5.00 via international mail. **JE** C72, C73, E32. **KW** Evolutionary Process. Hysteresis. Limit Cycles. Perfect Foresight. Dynamic Model.

AB This paper considers a simple pairwise random matching game in the society populated by two groups of agents: Conformists and Nonconformists. Depending on the relative frequencies of intergroup and intragroup matchings, the best response dynamics show three types of asymptotic behaviors: global convergence, hysteresis and limit cycles. In the hysteresis case, Conformists set the social custom, and Nonconformists revolt against it; what action becomes the custom is determined by "history." In the limit cycle case, Nonconformists become fashion leaders and switch their actions periodically, while Conformists follow with delay.

Mayers, David

PD April 1986. **TI** Ownership Structure across Lines of Property-Casualty Insurance. **AU** Mayers, David; Smith, Clifford W., Jr. **AA** Mayers: University of California, Los

Angeles. Smith: University of Rochester. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 8-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 28. **PR** $2.00; checks payable to U.C. Regents. **JE** G32, L22, G22. **KW** Insurance. Firm Organization. Ownership Structure.
AB Recent analysis has focused on the effect that firms' ownership structures have on the costs of producing products. In this paper, we examine evidence from the property-casualty insurance industry to see if there are significant differences in activity choices associated with alternative ownership structures. The range of ownership structures in the insurance industry includes Lloyds associations, stock companies, mutuals and reciprocals. We analyze the incentives faced by claimholders performing the three major functions within the insurance firm: the management function, the ownership/risk-bearing function, and the customer/policyholder function. We suggest that differing costs of controlling incentive conflicts among various claimholders to the insurance firm lead to the efficiency of various ownership structures across lines of insurance.

TI Corporate Spinoffs: Multiple Announcement and Ex-Date Abnormal Performance. **AU** Copeland, Thomas E.; Lemgruber, Eduardo F.; Mayers, David.

TI A Comparison of Single and Multifactor Portfolio Performance Methodologies. **AU** Chen, Nai-Fu; Copeland, Thomas E.; Mayers, David.

Mazarei, Adnan, Jr

PD March 1991. **TI** The Iranian Economy under the Islamic Republic: Institutional Change and Macroeconomic Performance (1979-1990). **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 616S; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 55. **PR** $2.50; checks payable to U.C. Regents. **JE** O53, O11, D72. **KW** Iran. Economic Development. Macroeconomic Model.
AB This paper examines changes in economic institutions and the macroeconomic performance of Iran since the 1979 revolution. The Iranian revolution is interpreted as a populist rent-seeking movement aimed at the redistribution of oil revenues. Subsequently, the macroeconomic performance of Iran since the revolution is discussed. While recognizing the profound impact of the revolutionary disruptions, the decline in oil revenues and the war with Iraq, it is argued that prevailing economic conditions in Iran are largely the outcome of the populist nature of the macroeconomic policies adopted by the Islamic Republic of Iran. After an extensive discussion of the performance of the Iranian economy since the revolution, the paper reviews the current attempts at economic stabilization and liberalization.

McAndrews, James J.

PD July 1990. **TI** Regional Authorities, Public Services, and the Location of Economic Activity. **AU** McAndrews, James J.; Voith, Richard. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-17; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 54. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** R41, R32, R34. **KW** Location Choice. Public Transportation. Firm Location.
AB In the presence of agglomeration and congestion eternalities the sequence of location choices made by firms results in an inefficient distribution of economic activity, since individual firms do not bear the congestion costs they impose on other firms. In this paper, we model the interaction of a public authority service strategies and firm location choices. We show that, depending on its strategic posture, a self-interested regional authority can effect a welfare-improving distribution of economic activity when compared with an economy without an authority or an economy with local authorities. We apply the model to public transit service and firm location choices in the Philadelphia metropolitan area.

PD January 1991. **TI** Worker Debt with Bankruptcy. **AU** McAndrews, James J.; Nakamura, Leonard I. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 91-2; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 27. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** J22, J31, J23. **KW** Labor Market. Labor Supply. Private Debt. Wages.
AB This paper analyzes the interactions between debt and effort choices in an abstract labor market. If workers who are paid their marginal product have debt, they alter their labor effort. Debt imposes a loss on workers when income is insufficient to repay the debt, so workers work longer hours to avoid the penalty. The presence of debt-burdened workers in the labor market can cause sticky nominal equilibrium wage and income levels for a range of labor demands. If there is an effort externality in the labor market, then the distortion of effort associated with debt can be socially beneficial.

McFadden, Daniel L.

TI The Method of Simulated Scores for the Estimation of LDV Models with an Application to External Debt Crises. **AU** Hajivassiliou, Vassilis A.; McFadden, Daniel L.

McGuire, Martin C.

PD April 1991. **TI** Identifying the Free Riders: How to Partition a Group into Positive and Zero Contributors to the Common Good. **AA** University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-14; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 8. **PR** no charge. **JE** H41, D61, D62. **KW** Public Goods. Free Riders.
AB When a heterogeneous group of people provide themselves with a pure public good and each follows Nash maximizing behavior in his allocation of resources, the resulting Nash-Cournot outcome will divide the group into contributors and free riders. This paper proposes an algorithm for discovering which individuals in the group fall into which of these two classes. The algorithm is based on identification for each individual of how much of the public good must be provided by others to drive that individual's contribution to zero.

McKelvey, Richard D.

PD July 1991. **TI** Initial versus Continuing Proposal Power in Legislative Seniority Systems. **AU** McKelvey,

Richard D.; Riezman, Raymond. **AA** McKelvey: California Institute of Technology. Riezman: University of Iowa. **SR** Caltech Social Science Working Paper: 769; Division of Humanities and Social Sciences, 228-77, California Institute of Technology, Pasadena, CA 91125. **PG** 16. **PR** no charge. **JE** D71, D72. **KW** Political Processes. Committees. Social Choice.

AB We compare two different seniority systems in a legislature whose sole task is to decide on distributive issues, and which operates under a Baron-Ferejohn recognition rule, where recognition probability is based on seniority. In the first system, called "initial proposal power," recognition probability for the initial proposal is based on seniority, but once the proposal is voted on by the legislature, all members have equal recognition probabilities for any reconsideration. Under the second system, called "continuing proposal power," seniority is used to determine proposal power both in the initial consideration and in any reconsideration. We find that in the case of seniority systems embodying continuing proposal power, there does not exist an equilibrium in which incumbents are reelected, and in which legislators would endogenously choose to impose such a seniority system on themselves. This contrasts with previous results in which we have shown that there does exist such an equilibrium for the case of initial proposal power. The reason for this result is that continuing proposal power lowers the value of senior members, since it makes them less desirable as coalition partners.

McKenzie, Joseph A.

TI The Causes and Costs of Thrift Institution Failures: A Structure-Behavior-Outcomes Approach. **AU** Cole, Rebel A.; McKenzie, Joseph A.; White, Lawrence J.

McKinnon, Ronald I.

PD July 1991. **TI** Financial Control in the Transition to a Market Economy. **AA** Stanford University. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 40; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 81. **PR** no charge. **JE** O53, P26, P27, O11. **KW** Market Economy. Soviet Union. Financial Markets. Fiscal Policy.

AB The political economy of the Soviet Union is in crisis. The old authoritarian model of allocating economic resources based on central planning has been discredited. But despite the enormous political shift in favor of restructuring, i.e., perestroika, the financial conditions necessary for a workable market economy remain elusive. Instead, as fiscal deficits and the domestic money stock spiral out of control, a potentially explosive internal inflation is forcing Soviet authorities to reimpose price and output controls. The success of perestroika depends on monetary and fiscal discipline and that, in turn, requires a radically new tax and banking system for the Soviet Union. After tracing the origins of the present impasse back to the nature of money and taxation under central planning, this paper sketches the proper sequencing of financial controls so that the ruble can be stabilized and economic liberalization can proceed.

McManus, Douglas A.

TI The Effects of Closure Policies on Bank Risk-Taking. **AU** Davies, Sally M.; McManus, Douglas A.

Meade, Ellen E.

PD May 1991. **TI** Using External Sustainability to Forecast the Dollar. **AU** Meade, Ellen E.; Thomas, Charles P. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Papers: 398; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 27. **PR** no charge. **JE** F32, F47, F31. **KW** Current Account. Exchange Rate. External Debt.

AB The sizable run-up in U.S. external debt over the 1980's has prompted many to ask whether continued current account deficits of the magnitude witnessed can be sustained. In several recent papers, different authors have concluded that a given path of the dollar is unsustainable. The conclusion drawn in these earlier papers does not allow for the substantial uncertainty that surrounds this issue, however. There is uncertainty about the estimated model of the U.S. current account that is used to generate the net demand for foreign assets for a given path of the dollar, about the preferences of foreign investors for U.S. assets, and about the mechanics of exchange rate determination that yields a particular path for the dollar. In this paper, we develop a way to explicitly address these sources of uncertainty.

Melitz, Jacques

PD January 1991. **TI** German Reunification and Exchange Rate Policy in the EMS. **AA** INSEE. **SR** Unite de Recherche Document de Travail ENSAE/INSEE: 9102; INSEE, Unite de Recherche, 18 Bd. Adolphe Pinard, 75675 Paris cedex 14, FRANCE. **PG** 22. **PR** no charge. **JE** F33, O57, F31, F36. **KW** Monetary Union. European Monetary System. Germany. Exchange Rate.

AB This article underlines the fact that the impact of German reunification on the mark is affected by current plans to move toward monetary union in the European Community. The fundamental value of the mark is different depending upon whether Germany will be part of a larger monetary union in the year 2000, or whether instead the EMS will have survived without major realignments or else with them. As a result, the impact of decisions by the other members to follow the mark during the process of German reunification will depend partly on market interpretations of the persistence of similar decisions in the future. The same policy actions by the others will have different effects depending upon the future outlook of the EMS.

PD July 1991. **TI** Brussels on a Single Money. **AA** Melitz: Institut de la Statistique et des Etudes Economiques, Paris. **SR** CEPR Discussion Paper: 556; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 23. **PR** Pounds 3.00 or $5.00. **JE** 430, 431, 432. **KW** Optimum Currency Area. Exchange Rate Regime European Monetary Union. Fiscal Federalism.

AB This review article discusses the recent document titled 'One Market, One Money' in which the European Commission develops its case for European monetary union. After examining the monetary issues, the article focuses on the reasons for the Commission's very worried attitude toward fiscal policy autonomy. The closing section considers the problem of the transition to a single money. Attention is also drawn to the issue of a lender of last resort.

Melmed-Sanjak, Jolyne

TI The Environment and International Trade. **AU** Chou, Chien-fu; Melmed-Sanjak, Jolyne; Shy, Oz.

Mendelson, Haim

TI Liquidity, Maturity and the Yields on U.S. Treasury Securities. **AU** Amihud, Yakov; Mendelson, Haim.

Mester, Loretta J.

PD February 1990. **TI** Traditional and Nontraditional Banking: An Information-Theoretic Approach. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-3; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 47. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** G21, G28. **KW** Banking. Commercial Banks. Regulation. Government Policy.

AB The 1980's have seen a revolution in both banking practice and banking theory. Deregulation has led to an increase in securitization of bank assets and loan sales. The traditional role of the bank as an intermediary between lenders and borrowers has changed -- now banks can originate loans and sell them, avoiding the continued costs of monitoring these loans to protect their equity but incurring the marketing costs. They can purchase loans originated by other institutions to better diversify their portfolios. Banking theory has also evolved, emphasizing the role of the bank as an information producer. Previous studies of the costs of commercial banking have not taken into account the changing nature of banking. In this paper I use a multiproduct approach to analyze the operating costs of a sample of large banks, where bank outputs are measured to account for the different types of information produced by banks.

PD July 1990. **TI** When Does the Prime Rate Change? **AU** Mester, Loretta J.; Saunders, Anthony. **AA** Mester: Federal Reserve Bank of Philadelphia. Saunders: New York University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-16; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 43. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** E43, E32. **KW** Interest Rate. Business Fluctuations. Inflation.

AB Although it can no longer be viewed as the rate that commercial banks charge their best borrowers, changes in the prime still makes headlines. This paper studies the frequency of changes in the prime rate. We model the prime rate as a time series variable that can be changed only at an administrative cost. This yields a logit model in which the probability of a change in the prime rate is a function of market variables, including the inflation rate, growth in demand, and increase in input prices since the last prime rate change. We test this model using data from a unique data set that gives the exact dating of the prime rate changes over the 1948-88 period. The results indicate that changes in exogenous variables trigger a larger probability of an upward prime rate change than a downward prime rate response.

TI Debt Covenants and Renegotiation. **AU** Berlin, Mitchell; Mester, Loretta J.

PD November 1990. **TI** Who Changes the Prime Rate? **AU** Mester, Loretta J.; Saunders, Anthony. **AA** Mester: Federal Reserve Bank of Philadelphia. Saunders: New York University. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-26; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 54. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** E58, E43, G21. **KW** Interest Rates. Banking. Commercial Banks.

AB Changes in the prime rate continue to make headlines. This paper studies the factors that determine which particular bank will be the first to instigate a change in the prime rate. In that paper, we modeled the prime rate as a time series variable that can be changed only at an administrative cost. This yielded a logit model in which the probability of a change in the prime rate is a function of market variables. We found that changes in these exogenous market variables triggered a larger probability of a prime rate increase than a prime rate decrease. This suggests that bank specific factors may be more important than market specific variables in explaining downward movements in the prime rate. Here we model the prime rate adjustment process as one that depends on both market and bank specific variables. We allow both the production cost and the prime rate adjustment cost to vary across banks. We find that, contrary to our expectations, bank specific variables are more important in explaining the prime rate's upward movements than downward movements.

Michael, Robert T.

TI The Home Environment: A Mechanism through which Maternal Employment affects Child Development. **AU** Desai, Sonal; Michael, Robert T.; Chase-Lansdale, Lindsay P.

Michel, Philippe

TI Which Rules Rather than Discretion in a Democracy? I. An Axiomatic Approach with Open-Loop Commitments. **AU** Cohen, Daniel; Michel, Philippe.

Miller, Bruce L.

PD July 1986. **TI** Cost Allocation and Opportunity Costs. **AU** Miller, Bruce L.; Buckman, A. G. **AA** Miller: University of California, Los Angeles. Buckman: California State University, Hayward. **SR** University of California at Los Angeles Anderson Graduate School of Management Accounting Working Paper: 84-5; Anderson Graduate School of Management, University of California, Los Angeles, CA 90024-1481. **PG** 29. **PR** $2.00; checks payable to UC Regents. **JE** M41, D23, D21. **KW** Opportunity Costs. Firm Structure. Scale Economies. Accounting.

AB One explanation for the widespread use of allocated fixed costs is that they can serve as a proxy for difficult-to-calculate opportunity costs. This explanation is pursued by modeling a service department as an M/M/s/s queueing system. Two main results are that the expected value of opportunity costs equals both the incremental productivity of capacity and the optimal transfer price. When the cost of capacity is a Cobb-Douglas form, C(s) and the exponent is close to one, we show that allocated fixed costs are a good proxy for average opportunity costs. However, if there are great economies of scale (The exponent is close to zero), then a method which charges users only for the variable costs of the service department is recommended. Finally, the economic efficiency of transfer

prices based on either variable cost or full cost is compared with optimal transfer pricing policies.

TI The Welfare Effects of Public Information in Both Complete and Asymmetric Information Markets. **AU** Copeland, Thomas E.; Miller, Bruce L.

TI The Welfare Effects of Public Information in Both Complete and Asymmetric Information Markets. **AU** Copeland, Thomas E.; Miller, Bruce L.

Miller, Robert A.

TI Human Capital, Aggregate Shocks and Panel Data Estimation. **AU** Altug, Sumru; Miller, Robert A.

Mills, Leonard O.

TI The Role of Commodity Prices in Formulating Monetary Policy. **AU** Cody, Brian J.; Mills, Leonard O.

TI The Role of Monetary and Real Shocks in Near-Permanent Movements in GNP. **AU** Boschen, John F.; Mills, Leonard O.

TI Persistence and Convergence in Relative Regional Incomes. **AU** Carlino, Gerald A.; Mills, Leonard O.

Mincer, Jacob

PD November 1990. **TI** Human Capital, Technology, and the Wage Structure: What do Time Series Show? **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 505; Department of Economics, Columbia University, New York, New York 10027. **PG** 30. **PR** $5.00. **JE** J24, J31, O33. **KW** Human Capital. Wage Differentials. Technology. Wages. Education.

AB The major purpose of this study was to detect effects of technologically based changes in demand for human capital on the educational and experience wage structure in annual CPS data, 1963 to 1987. Major findings are: 1. Year-to-year educational wage differentials are quite closely tracked by relative supplies of young graduates, and by indexes of relative demand, such as research and development (R&D) expenditures per worker, and ratios of service to goods employment. Of these, R&D indexes account for most of the explanatory power. Indexes of (Jorgenson type) productivity growth and of international competition are significant as alternatives, but show weaker explanatory power. 2. The observed steepening of experience profiles of wages is explained, in part, by changes in relative demographic supplies (cohort effects), and in part by the growing profitability of human capital which extends to that acquired on the job. Evidence appears in the significance of profitability variables or in demand factors underlying them, given the relative demographic supplies in the wage profile equations.

Mohamed, Ahmed H.

PD November 1990. **TI** The Impact of Domestic Market Structure on Exchange Rate Pass-Through. **AA** Temple University and Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-25; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 56. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** F31, F12, L11. **KW** Exchange Rate. Imports. Market Structure. Imperfect Competition.

AB The behavior of import prices and their response to movements in the exchange rate have received increasing attention in recent years. Empirical evidence, based on aggregate data, shows that import prices do not fully reflect the movements in dollar exchange rates and that the relationship between import prices and exchange rates may be asymmetric, especially in a more concentrated market. This paper utilizes a Bertrand imperfect competition model to investigate the impact of domestic market structure on the adjustment of import prices to changes in the exchange rate. It extends previous research in two ways. First, it provides new evidence on import price adjustment to changes in exchange rates in heretofore unexamined industries. More importantly, it utilizes a panel data set that, when coupled with the random effects estimator, allows for the control of industry-specific effects and asymmetry in the import price adjustments.

Montgomery, John D.

PD April 1991. **TI** Market Segmentation and 1992: Toward a Theory of Trade in Financial Services. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Papers: 394; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 40. **PR** no charge. **JE** F21, F36, F15. **KW** Financial Intermediation. International Investment. Capital Mobility. Banking.

AB The effect of the unification of the European banking market on the efficiency of the allocation of capital across Europe depends on the economic forces behind banking structure. Such forces are not well understood. The paper discusses a conceptual framework for analyzing financial services (especially bank loans and deposits), in which a key distinction is between services offered across borders and those services where location of the intermediary matters. Empirical evidence from Italy is examined that suggests that banking markets are geographically fragmented, possibly because of natural, as opposed to regulatory, barriers to capital mobility. In the light of this conceptual framework and the empirical results, the likely effect of European integration on real capital mobility and efficiency of banking markets is discussed.

Mookherjee, Dilip

TI Efficiency of Markets under Moral Hazard with Side-Trading. **AU** Kahn, Charles M.; Mookherjee, Dilip.

TI Coalition Proof Equilibrium in an Adverse Selection Insurance Economy. **AU** Kahn, Charles M.; Mookherjee, Dilip.

Morkre, Morris E.

PD October 1990. **TI** The Effect of Subsidized Imports on Domestic Industry: A Comparison of Market Structures. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 180; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 17. **PR** no charge. **JE** F12, F11. **KW** Imports. Oligopoly. Trade Model.

AB Does the extent of injury suffered by a domestic industry from unfair imports depend on the type of competition that exists between domestic and foreign firms? Is injury more severe when domestic and foreign firms are perfect competitors or when they are oligopoly rivals? These questions have

important implications for such issues as the administration of U.S. countervailing duty law. This paper attempts to shed light on these issues by comparing the injury caused by subsidized imports under five different market structures, perfect competition and four types of oligopolies.

Moulton, Kirby

PD November 1990. **TI** Import Demand for Canned Peaches, Pears, and Tomato Products. **AU** Moulton, Kirby; Liu, Jianmin. **AA** University of California at Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 573; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 21. **PR** $5.00. **JE** Q17, F13, Q11. **KW** Agriculture. Trade Policy. Imports. Subsidies.

AB Changes in EC processor subsidies and proposed changes in import duties will alter U.S. import prices for processed peaches, pears and tomato products. This article reports the results of estimating import demand functions for these products. The price elasticity of import demand with respect to import price ranges from -2.94 to -3.53 for these products indicating that import levels will be sensitive to changes in tariffs and subsidies.

Mueller, Dennis C.

TI Fair and Equal Representation. **AU** Kennelly, Brendan; Mueller, Dennis C.

Mukhopadhyay, Sudhin K.

PD June 1991. **TI** Adapting Household Behavior to Agricultural Technology in West Bengal, India: Wage Labor, Fertility and Child Schooling Determinants. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 631; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven, CT 06520. **PG** 26. **PR** $2.00 + postage. **JE** Q16, Q12. **KW** Agricultural Technology. Fertility. Education. Children. Agriculture.

AB Despite substantial research on the determinants and impacts of the green revolution, little attention has been given to how this new agricultural technology is related to the allocation of resources among persons and activities within households. This problem has been addressed here with data from farm-households in the State of West Bengal, India, using a framework where adoption of new technology, participation of men and women in the hired agricultural labor force, fertility and child schooling are jointly determined. Results show that the new technology has changed time allocation patterns of men and women promoting higher fertility and population growth. Some of the income gains of the new technology are being invested in larger families rather than increased schooling of children. Greater education and increased wages of women are likely to contribute to their higher labor force participation, reduction in fertility and increase in the schooling of the next generation of children.

Muller, Eitan

TI Integral Games: Theory and Applications. **AU** Fershtman, Chaim; Kamien, Morton I.; Muller, Eitan.

Myerson, Roger E.

PD March 1991. **TI** Proportional Representation, Approval Voting, and Coalitionally Straightforward Elections. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 928; J. L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 37. **PR** $3.00 in U.S. or Canada; $5.00 via international mail. **JE** D71, D72. **KW** Coalitions. Voting. Legislature. Electoral Systems. Political System.

AB This paper considers basic constitutional questions about how to elect a legislature. Electoral systems that require blocks of voters to coordinate their votes create a need for pre-election leadership and raise barriers to entry against new parties. Such barriers to entry can rigidify the political system and decrease the incentives for established political leaders to serve the public honestly and effectively. So we consider an axiom of coalitional straightforwardness, which asserts that an electoral system should minimize the need for pre-election coordination of voters who share simple dichotomous preferences. Axioms of no divisiveness, neutrality of party labels, responsiveness, and homogeneity (or coalitional autonomy) are also formulated.

TI An Experimental Study of Voting Rules and Polls in Three-Way Elections. **AU** Forsythe, Robert; Myerson, Roger E.; Rietz, Thomas; Weber, Robert.

Nakamura, Leonard I.

TI Worker Debt with Bankruptcy. **AU** McAndrews, James J.; Nakamura, Leonard I.

TI Housing Appraisals and Redlining. **AU** Lang, William W.; Nakamura, Leonard I.

Nason, James M.

PD June 1991. **TI** The Permanent Income Hypothesis when the Bliss Point is Stochastic. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-18; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 43. **PR** not available. **JE** E21, D12, D91. **KW** Permanent Income Hypothesis. Consumption.

AB A version of the permanent income model is developed in which the bliss point of the agent is stochastic. The bliss point depends on realizations of the stochastic process generating labor income and stochastic shock. The model predicts consumption and labor income share a common trend and that a linear combination of current consumption, current labor income, and once lagged consumption is stationary. Empirically, consumption appears more serially correlated than the model is capable of supporting. However, the restriction imposed by the common trend mitigates somewhat the sensitivity of changes in consumption to changes in lagged labor income.

Neary, J Peter

PD July 1991. **TI** Cost Asymmetries in International Subsidy Games: Should Governments Help Winners or Losers?. **AA** Neary: Department of Economics, University College Dublin. **SR** CEPR Discussion Paper: 560; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 35. **PR** Pounds 3.00 or $5.00. **JE** 422, 616. **KW** Strategic Trade Policy. Export Subsidies. Industrial Policy. Cournot/Bertrand Competition.

AB This paper examines the optimality of export subsidies in oligopolistic markets, when home and foreign firms have different costs and there is an opportunity cost to public funds. Subsidies are found to be optimal only for surprisingly low values of the shadow price of government funds, and if subsidies are justified they should be higher the more cost-competitive are domestic firms. These results hold under both Cournot competition and Bertrand competition when firms move before governments. The results suggest that recent arguments for export subsidies apply only for firms that would be highly profitable even without subsidies.

Neven, D.

TI Portfolio Selection by Mutual Funds: An Equilibrium Model. **AU** Dermine, Jean; Neven, D.; Thisse, J. F.

Newbery, David M.

TI Competition in the British Electricity Spot Market. **AU** Green, Richard; Newbery, David M.

PD May 1991. **TI** An Analysis of the Hungarian Tax Reform. **AA** Newbery: Department of Applied Economics, University of Cambridge. **SR** CEPR Discussion Paper: 558; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 28. **PR** Pounds 3.00 or $5.00. **JE** 123, 320. **KW** Hungary. Tax Reform. Transformation. Eastern Europe.
AB The feasibility of systemic reforms may depend on their distributional consequences. The shift to a market economy can be expected to increase wage differentials and unemployment, which will have an adverse effect on income distribution. Income tax reform and the change in the system of consumer subsidies and indirect taxes may modify these market mediated impacts, and could go some way to offsetting some of these inegalitarian tendencies. Much will depend on the speed and efficacy of the alternative redistributional instruments and institutions which will be required to replace the former enterprise-based systems, on the speed with which incomes and prices adjust, and on the budgetary strains created by the debt burden and the adverse terms-of-trade shocks.

Nguyen, Sang V.

PD May 1991. **TI** Measuring Total Factor Productivity, Technical Change and the Rate of Returns to Research and Development. **AU** Nguyen, Sang V.; Kokkelenberg, Edward C. **AA** Nguyen: U.S. Bureau of the Census. Kokkelenberg: State University of New York, Binghamton. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 91-3; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 30. **PR** no charge. **JE** L61, O32, O47, D24. **KW** R&D. Productivity. Manufacturing. Technological Change.
AB Recent research indicates that estimates of the effect of R&D on total factor productivity growth are sensitive to different measures of total factor productivity. In this paper, we use establishment level data for the flat glass industry extracted from the Census Bureau's Longitudinal Research Database to construct three competing measures of total factor productivity. We then use these measures to estimate the conventional R&D intensity model. Our empirical results support previous findings that the estimated coefficients of the model are sensitive to the measurement of total factor productivity. Also, when using microdata and more detailed modeling, R&D is found to be a significant factor influencing productivity growth. Finally, for the flat glass industry, a specific technical change index capturing the learning-by-doing process appears to be superior to the conventional time trend index.

Nicolai, J. P.

TI Behaviors, Beliefs and Causal Laws: The Example of the Crude Oil Future Market. **AU** Bruneau, C.; Nicolai, J. P.

Nielson, David J.

TI The Political Economy of Productive and Predatory Policies: A Case Study from Agriculture. **AU** de Gorter, Harry; Nielson, David J.; Rausser, Gordon C.

None

PD January 1991. **TI** Review of the Year's Work, 1989-90. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 16; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 56. **PR** no charge. **JE** J40, J50. **KW** Industrial Relations. Human Resources. Entrepreneurship. National Economic Performance.
AB no abstract.

Novos, Ian E.

PD August 1989. **TI** Learning by Doing, Adverse Selection and Firm Structure. **AA** University of Southern California. **SR** University of Southern California Modelling Research Group Working Paper: M8914; Department of Economics, University of Southern California, University Park, Los Angeles, CA 90089-0152. **PG** 35. **PR** not available. **JE** D21, D23, L23, D92. **KW** Property Rights. Firm Structure. Learning. Industrial Organization.
AB Explaining the existence of firms has long provided much employment to economists. Much of this literature has focused on the firm as either a transactions cost economizing institution or as a means of allocating residual property rights to output. Less attention has focused on the organizational aspects of the production process itself, although the success of the Japanese economy has led some scholars to examine the structure and organization of Japanese firms, and to compare it to the typical Western model. This paper explores the implications for firm structure of a particular form of learning by doing. This form of learning by doing arises because of the relationship between a set of jobs, and it implies that a worker's productivity in some of these jobs depends on whether the worker had previously performed certain other jobs in the set. This issue is analyzed in the framework of an overlapping generations model.

O Grada, Cormac

PD May 1991. **TI** New Evidence on the Fertility Transition in Ireland 1880 -1911. **AA** O Grada: Department of Political Economy, University College Dublin. **SR** CEPR Discussion Paper: 531; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 32. **PR** Pounds 3.00 or $5.00. **JE** 040, 044, 840. **KW** Fertility. Ireland. Population.
AB Recent analyses of Ireland's marital fertility transition based on the Princeton Ig and the Stanford CPA measures are reassessed. Revised county estimates of Ig are subjected to regression analysis, and added insight into CPA is offered by comparing Ireland with Scotland and applying the measure to three specially-constructed local data sets.

O'Brien, Daniel P.

PD October 1990. **TI** Vertical Control in Markets with Multilateral Competition. **AU** O'Brien, Daniel P.; Shaffer, Greg. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 90-18; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 25. **PR** not available. **JE** L14, L22, D21. **KW** Manufacturing. Retail Market. Contracts. Profits.

AB It is widely believed that a manufacturer who distributes her product through risk neutral retailers can maximize total channel profits with two-part tariff contracts, provided the retail price is the only target of control. This paper shows that this result is false when retailers' contracts are private information. Private bilateral contracts give rise to coordination difficulties and multilateral competition among channel members. Political and contractual restraints may be called upon to mitigate these problems. When contracts are private information, retailers pricing strategies depend on their beliefs about their rivals' contracts. We show that resale price maintenance can maximize channel profits by making beliefs irrelevant.

TI The Existence of Pareto Superior Price Limits and Trading Halts. **AU** Kodres, Laura E.; O'Brien, Daniel P.

O'Brien, James M.

TI Market-Based Deposit Insurance Premiums: An Evaluation. **AU** Kuester, Kathleen A.; O'Brien, James M.

O'Flaherty, Brendan

PD September 1990. **TI** On the Job Screening, Up or Out Rules, and Firm Growth. **AU** O'Flaherty, Brendan; Siow, Aloysius. **AA** O'Flaherty: Columbia University. Siow: University of Toronto. **SR** Economics Research Center/NORC Discussion Paper: 90-11; Economics Research Center/NORC, 6030 S. Ellis, Chicago, Illinois 60637. **PG** 41. **PR** $2.00; send requests to Librarian, NORC. **JE** M12, D21, J41, J21. **KW** Employment. Promotion. Human Capital. Profits.

AB This paper uses on-the-job screening to derive a stochastic and dynamic model hiring, promotion and dismissal policies, and their impact on total firm employment and output. The model provides an explanation of the up-or-out rule observed in many organizations. It also provides an explanation for a cost of adjustment mechanism for the stock of human capital in a firm. The model predicts that the rate of growth of employment and output of the firm is independent of the size of the firm (Gibrat's Law), and positively related to per period profitability. The incidence of layoffs of junior employees is negatively related to per period profitability.

PD September 1990. **TI** Up or Out Rules in the Market for Lawyers. **AU** O'Flaherty, Brendan; Siow, Aloysius. **AA** O'Flaherty: Columbia University. Siow: University of Toronto. **SR** Economics Research Center/NORC Discussion Paper: 90-10; Economics Research Center/NORC, 6030 S. Ellis, Chicago, Illinois 60637. **PG** 29. **PR** $2.00; send requests to Librarian, NORC. **JE** J44, J21, M12. **KW** Promotion. Occupation.

AB Data on separation and promotion times for a sample of newly hired lawyers are used to estimate a structural model of up-or-out rules and firm growth. The empirical model is a multi-state duration model with unobserved heterogeneity and correlated hazards. The model can replicate the gross features of the data. The point estimates show that associates leave the firm after one bad signal and most of those that are promoted did not give any bad signals.

PD March 1991. **TI** How to be a Dictator: The Advantages of Incumbency. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 530; Department of Economics, Columbia University, New York, New York 10027. **PG** 33. **PR** $5.00. **JE** D72, D71. **KW** Democracy. Dictatorships. Political Processes. Political Economy.

AB Why can dictators collect rent? What makes them different? That is, why can't I overthrow any dictator in the world simply by promising each of his henchpeople epsilon more than the dictator has promised? We present a model where insurgents have to incur "communication" costs up front. This model has implications for the power of incumbency in democracies, and for the distribution of tenures of dictators.

PD April 1991. **TI** Theory Issues in Homelessness. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 535; Department of Economics, Columbia University, New York, New York 10027. **PG** 43. **PR** $5.00. **JE** J11, I32, I31. **KW** Poverty. Homeless. Demographics.

AB What caused the apparent increase in the number of homeless people in the United States in the last ten years? What should be done about it? By this time we know a great many facts about homelessness. Unfortunately, though, these facts are not sufficient to answer these two questions. That's because all of the simple and obvious stories we are tempted to tell about homelessness are contradicted by one or more facts, and because no one has devised more complex and subtle stories yet. The aim of this paper is to show the problems with the simple stories, and to propound some more complex ones. Since this is truly a discussion paper, there are no conclusions. We start with the simplest stories, and go on to the more complex ones.

Oates, Wallace E.

TI Measuring Peer Group Effects: A Study of Teenage Pregnancy. **AU** Evans, William N.; Oates, Wallace E.; Schwab, Robert M.

Olson, Craig A.

PD May 1991. **TI** A Comparison of Interest Arbitrator Decision-Making in Experimental and Field Settings. **AU** Olson, Craig A.; Dell'Omo, Gregory G.; Jarley, Paul. **AA** Olson: Princeton University and University of Wisconsin, Madison. Dell'Omo: Canisius College. Jarley: University of Iowa. **SR** Princeton Industrial Relations Section Working Paper: 284; Industrial Relations Section, Department of Economics, Princeton University, Princeton, NJ 08544-2098. **PG** 18. **PR** $2.00. **JE** J52, C92, C93. **KW** Arbitration. Decision Theory. Experimental Economics.

AB Recent studies have investigated arbitrator decision rules in both experimental and field settings. The external validity of experimental studies is evaluated by comparing the decisions made in an experiment with those made in actual cases for a common group of arbitrators. The results show the decision models used in the two settings are very similar when the decision problem in the two settings is carefully controlled to be the same.

Oswald, Andrew

TI An Empirical Study of Unemployment and the Number of Children in Care. **AU** Carruth, Alan; Oswald, Andrew.

TI Efficient and Inefficient Employment Outcomes: A Study Based on Canadian Contract Data. **AU** Christofides, Louis; Oswald, Andrew.

TI Real Wage Determination and Rent-Sharing in Collective Bargaining Agreements. **AU** Christofides, Louis; Oswald, Andrew.

Oum, Tae Hoon

PD April 1990. **TI** Transportation Infrastructure Pricing in the Presence of Lumpy Investment. **AU** Oum, Tae Hoon; Zhang, Yimin. **AA** University of British Columbia. **SR** Queen's John Deutsch Institute Discussion Paper: 16; c/o Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 28. **PR** $3.00 Canada and U.S.; $3.50 Foreign. **JE** R41. **KW** Transportation. Transportation System. Congestion. Urban Economics.

AB In this paper we investigate the relationship between congestion tolls and capacity expansion costs for congestion-prone transportation infrastructures with lumpy investment. With constant variable costs and social marginal cost pricing, this relationship determines the cost recovery status of an infrastructure authority. The theoretical model for optimal user charges and the timing of capacity expansion shows that the relative magnitudes of total congestion tolls and total capacity costs in an investment cycle depend on the time pattern of traffic growth, a point overlooked in the literature. A queuing model is used to conduct a numerical experiment to determine the cost recovery ratios under various time paths of traffic growth.

Paarsch, Harry J.

PD June 1991. **TI** Empirical Models of Auctions and an Application to British Columbian Timber Sales. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-19; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** not available. **PR** not available. **JE** D44, Q23. **KW** Auctions. Timber. Common Value. Private Value.

AB In this paper I construct simple game-theoretic models of behavior at English and first-price sealed-bid auctions within both the common and private value paradigms. The empirical implications of these models are confronted by data from a sample of timber sales held in the province of British Columbia, Canada, first in terms of the reduced form predictions and subsequently in terms of the structural predictions in an effort to decide which paradigm appears appropriate and whether the data support rational behavior within that paradigm.

TI Piecewise Pseudo-Maximum Likelihood Estimation in Empirical Models of Auctions. **AU** Donald, Stephen G.; Paarsch, Harry J.

Perloff, Jeffrey M.

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

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

PD April 1991. **TI** Econometric Analysis of Imperfect Competition and Implications for Trade Research. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 607; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 32. **PR** $6.40. **JE** L11, D43. **KW** Imperfect Competition. Commercial Policy. Market Power. Industrial Organization.

AB In this paper, modern techniques for conducting market power studies are contrasted to traditional methods and then suggestions are made as to how these techniques can be applied in trade studies. Most of the emphasis in the paper is on the use of the new methods to identify and measure market power. With the development of new industrial organization theory, innovations in econometrics, reduced costs of computing, and the availability of better data, new empirical techniques based on formal models of maximizing behavior are replacing traditional approaches. Typically, in the traditional Structure-Conduct-Performance (SCP) approach, an accounting measure of profits or other measure of market power or structure is regressed on a variety of endogenous variables that are thought to reflect conduct using data from many industries. The link between these conduct variables and market structure is rarely made formal.

TI Legal Requirements that Artists Receive Resale Royalties. **AU** Karp, Larry S.; Perloff, Jeffrey M.

Pesaran, M. Hashem

PD February 1991. **TI** Estimating Limited-Dependent Rational Expectations Models: With an Application to Exchange Rate Determination in a Target Zone. **AU** Pesaran, M. Hashem; Samiei, Hossein. **AA** Pesaran: University of California, Los Angeles and Trinity College, Cambridge. Samiei: Fitzwilliam College, Cambridge. **SR** University of California at Los Angeles Department of Economics Working Paper: 612; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 33. **PR** $2.50; checks payable to U.C. Regents. **JE** C62, F31, E42. **KW** Rational Expectations. Monetary Regime. Exchange Rate.

AB This paper is concerned with the solution and estimation of a simple class of linear rational expectations models with current expectations of the endogenous variables when there are a priori bounds on the dependent variable. We show that for plausible values of the parameters, the model has a unique RE solution. We first consider the exact maximum likelihood estimation of such a limited-dependent rational expectations (LD-RE) model and perform a number of Monte Carlo experiments to shed light on the small sample properties of a number of alternative estimators. The results clearly illustrate the importance of taking proper account of the limited nature of the dependent variable and its expectations in the estimation of the parameters of the LD-RE models.

Peters, Elizabeth H.

TI Fertility and the Personal Exemption: Implicit Pronatalist Policy in the United States. **AU** Whittington, Leslie A.; Aim, James; Peters, Elizabeth H.

Phelan, Christopher

PD September 1990. **TI** Computing Multiperiod, Information-Constrained Optima. **AU** Phelan, Christopher; Townsend, Robert M. **AA** University of Chicago. **SR** Economics Research Center/NORC Discussion Paper: 90-13; Economics Research Center/NORC, 6030 S. Ellis, Chicago, Illinois 60637. **PG** 40. **PR** $2.00; send requests to Librarian, NORC. **JE** D91, D11, D12. **KW** Consumption. Labor Supply. Consumer Economics. Intertemporal Model.

AB This paper presents a detailed theoretical derivation and justification for methods used to compute solutions to a multiperiod (including infinite period), continuum agent, unobserved effort economy. Actual solutions are displayed illustrating cross-sectional variability in consumption and labor effort in the population at a point in time and variability for a typical individual over time. The optimal trade-off between insurance and incentives is explored and the issue of excess variability is addressed by consideration of the analog full information economy and various restricted contracting regimes.

Phelps, Edmund S.

TI Proposed Reforms of the Economic System of Information and Decision in the USSR: Commentary and Advice. **AU** Arrow, Kenneth J.; Phelps, Edmund S.

PD December 1990. **TI** Economic Justice to the Working Poor through a Wage Subsidy. **AA** Columbia University. **SR** Columbia Department of Economics Working Paper: 510; Department of Economics, Columbia University, New York, New York 10027. **PG** 23. **PR** $5.00. **JE** I31, I32, D63. **KW** Poverty. Demographics. Welfare.

AB I will discuss the status of the working poor in this country and the ways by which, acting collectively through the government, we can improve the terms at which the working poor participate in the cooperative enterprise we call the economy. Motivating these concerns are some old ideas of equity, or economic justice.

TI Fiscal Policy and Economic Activity in the Neoclassical Theory without Bequests. **AU** Kanaginis, George T.; Phelps, Edmund S.

Philippopoulos, Apostolis

TI Political Parties, Elections and Inflation in Greece. **AU** Alogoskoufis, George S.; Philippopoulos, Apostolis.

Phillips, Peter C. B.

TI Testing the Null Hypothesis of Stationarity Against the Alternative of a Unit Root: How Sure are We that Economic Time Series have a Unit Root? **AU** Kwiatkowski, Denis; Phillips, Peter C. B.; Schmidt, Peter.

PD May 1991. **TI** Time Series Modeling with a Bayesian Frame of Reference: I. Concepts and Illustrations. **AU** Phillips, Peter C. B.; Ploberger, Werner. **AA** Phillips: Yale University. Ploberger: Yale University and Technische Universitat Wien. **SR** Yale Cowles Foundation Discussion Paper: 980; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 57. **PR** no charge. **JE** C11, C22, C51, C52. **KW** Time Series. Modeling. Bayesian Analysis. Martingale.

AB This paper offers a general approach to time series modeling that attempts to reconcile classical and Bayesian methods. The central idea put forward to achieve this reconciliation is that the Bayesian approach relies implicitly on a frame of reference for the data generating mechanism that is quite different from the one that is employed in the classical approach. Differences in inferences from the two approaches are therefore to be expected unless the altered frame of reference is taken into account. We show that the new frame of reference in Bayesian inference is a consequence of a change of measure that arises naturally in the application of Bayes theorem. Our paper explores this change of measure and its consequences using martingale methods. Examples are given to illustrate its practical implications. No assumptions concerning stationarity or rates of convergence are required and techniques of stochastic differential geometry on manifolds are involved. Some implications for statistical testing are explored and we suggest new tests, which we call Bayes model tests, for discriminating between models.

TI The Spurious Effect of Unit Roots on Exogeneity Tests in Autoregressions: An Analytical Study. **AU** Toda, H. Y.; Phillips, Peter C. B.

TI Vector Autoregression and Causality. **AU** Toda, H. Y.; Phillips, Peter C. B.

Pickering, Margaret Hastings

PD May 1991. **TI** A Review of Corporate Restructuring Activity, 1980-1990. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Staff Studies Paper: 161; Staff Studies Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 21. **PR** not available. **JE** G34, G32, L11. **KW** Mergers. Takeovers. Market Structure.

AB After running at an extraordinary pace in 1988 and 1989, corporate restructuring activity and the associated retirement of equity fell sharply in 1990. The remarkable strength in the final two years of the 1980's occurred despite measures, taken at the federal and state levels, to discourage takeover activity. Reflecting restructuring activity, net retirements of equity by nonfinancial corporations surged to a record $130 billion in 1988 and receded only slightly in 1989 to $124 billion. This study has two purposes. One is to discuss these recent developments more fully by placing them in the context of the merger activity that occurred in the 1980's. The second is to present aggregate estimates of merger and acquisition activity that form the basis of net equity retirements published in the Federal Reserve flow of funds accounts.

Pieptea, Dan R.

TI Controlling Interest Rate Risk and Return with Futures. **AU** Geske, Robert; Pieptea, Dan R.

Ploberger, Werner

TI Time Series Modeling with a Bayesian Frame of Reference: I. Concepts and Illustrations. **AU** Phillips, Peter C. B.; Ploberger, Werner.

Png, I. P. L.

PD January 1987. **TI** Price Discrimination through Offers to Match Price. **AU** Png, I. P. L.; Hirshleifer, David. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of

Management Accounting Working Paper: 87-1; Anderson Graduate School of Management, University of California, Los Angeles, CA 90024-1481. **PG** 24. **PR** $2.00; checks payable to UC Regents. **JE** L42, L21, D40. **KW** Price Discrimination. Industrial Policy.
AB In this paper, a firm discriminates between two classes of customers who have different cost of information by coupling a list price with an offer to match the price of any other shop. If the list price elsewhere is lower, the firm will be successful in discrimination. The list price of each firm is increasing in the number of sellers, and the total sales are decreasing in the number of sellers. Furthermore, if sellers coordinate, they discriminate more efficaciously and increase their profits by increasing their total sales.

Ponssard, J.P

TI Reference and Time Generate Tacit Cooperation in Hierarchical Relationship. **AU** Kramarz, F.; Ponssard, J.P.

Porter, Robert H.

TI Auctions for Oil and Gas Leases with an Informed Bidder and a Random Reservation Price. **AU** Hendricks, Kenneth; Porter, Robert H.; Wilson, Charles A.

Portes, Richard

PD May 1991. **TI** The Path of Reform in Central and Eastern Europe: An Introduction. **AA** Portes: Department of Economics, Birkbeck College, London. **SR** CEPR Discussion Paper: 559; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 32. **PR** Pounds 3.00 or $5.00. **JE** P20, P30, O10. **KW** Eastern Europe. Economic Reforms. Sequencing.
AB This paper is the Introduction to a special issue of European Economy on 'The Path of Reform in Central and Eastern Europe'. It discusses the sources of the current wave of 'Europessimism': exogenous shocks, adjustment costs, sequencing errors, and other policy errors. This analysis may help in assessing the extent to which we are observing a 'J-Curve' phenomenon. The paper then considers some key topics in the strategy of reformers: (i) establishing a regime change; (ii) the order, speed and robustness of the chosen sequence of reforms; (iii) the institutional framework and the behaviour of firms; (iv) financial restructuring; (v) nominal and real anchors; (vi) convertibility and exchange rate policy; (vii) trade and debt.

Potscher, Benedikt M.

PD April 1991. **TI** Basic Structure of the Asymptotic Theory in Dynamic Nonlinear Econometric Models, Part II: Asymptotic Normality. **AU** Potscher, Benedikt M.; Prucha, Ingmar R. **AA** University of Maryland, College Park. **SR** University of Maryland Department of Economics Working Paper Series: 91-11; University of Maryland, Department of Economics, College Park, MD 20742. **PG** 91. **PR** no charge. **JE** C13, C22. **KW** Dynamic Models. Method of Moments. Asymptotic Normality. Asymptotic Theory. Nonlinear Models.
AB This is the second of two papers that provide an expository discussion of the basic structure of the asymptotic theory of M-estimators in dynamic nonlinear models and a review of the literature. The first paper, Potscher and Prucha (1991), deals with consistency. In the present paper we discuss asymptotic normality. As an important ingredient to the asymptotic normality proof in dynamic nonlinear models we consider central limit theorems for dependent random variables. We also discuss the estimation of the variance covariance matrix of M-estimators under heteroskedasticity and autocorrelation.

Prokop, Jacek

TI A Game Theoretical Approach to the International Debt Overhang. **AU** Kaneko, Mamoui; Prokop, Jacek.

PD July 1991. **TI** Dynamics of International Debt Overhang with Two Lender Banks. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 946; Northwestern University, 2001 Sheridan Road, Evanston, IL 60208-2014. **PG** not available. **PR** $3.00 in the U.S. or Canada; $5.00 via international mail. **JE** F34, G21. **KW** International Debt. Foreign Debt.
AB This paper presents a dynamic formalization of the behavior of creditor banks in the presence of the secondary market for debts. We formulate the problem as an infinite horizon game with two banks as players where each bank decides in every period either to sell its loan exposure to the debtor country at the present secondary market price, or to wait and keep its exposure to the next period. We show that there exist three types of subgame perfect equilibria with the property called the time continuation. We consider the relationships between our equilibria and those of the Kaneko-Prokop (1991) one-period approach to the same problem and show that their one-period approach does not lose much of the dynamic nature of the problem.

PD August 1991. **TI** Duration of Debt Overhang with Two Lender Banks. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Paper: 949; Northwestern University, 2001 Sheridan Road, Evanston, IL 60208-2014. **PG** not available. **PR** $3.00 in the U.S. or Canada; $5.00 via international mail. **JE** C72, F34, G21. **KW** International Debt. Secondary Markets. Dynamic Games. Foreign Debt.
AB This paper discusses the duration of the debt overhang with two lender banks. We model the problem as an infinite horizon with two banks as players. In every period, each bank decides either to sell its loan exposure to the debtor country at the present secondary market price, or to wait and keep its exposure to the next period. Under the assumptions of homogeneous price function and short length of periods, we show that the expected duration in the equilibrium becomes large when the degree of homogeneity is low, and tends to (ln 2)/(ln beta squared) (beta is the annual interest factor) as the degree of homogeneity approaches zero. This result implies that the lower bound for the duration is 4 years. We interpret it as a tendency for the debt overhang to last for a somewhat long time.

Prucha, Ingmar R.

TI Basic Structure of the Asymptotic Theory in Dynamic Nonlinear Econometric Models, Part II: Asymptotic Normality. **AU** Potscher, Benedikt M.; Prucha, Ingmar R.

Putterman, Louis

PD January 1991. **TI** Dualism and Reform in China. **AA** Brown University. **SR** Brown University Department

of Economics Working Paper: 91-3; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 43. **PR** not available. **JE** O53, O21, O17. **KW** Economic Reform. China. Agriculture. Economic Development.

AB An illuminating way of understanding the evolution of China's economy in the post-Mao reform period is to focus on the divisibility of the economy into spheres characterized by differing institutional regimes. From this standpoint, the economy of the Mao period was dominated by a labor intensive, state administered and implicitly taxed collective agriculture, on the one hand, and state owned and administered capital intensive industry, on the other. The post-Mao period has been distinguished by the rapid growth of activities that are not state owned and managed, not agricultural, and not systematically taxed through the state administered price system, but also by the survival of some of the major institutional features characterizing staple agriculture and the state sector. An analysis of tensions between the requirements of state industry and the attempt to reform agriculture, between state and non-state industry, and between staple agriculture and other rural activities, serves to identify key problems in China's economic development and reform process.

TI The Supply of Labor by Individuals to a Chinese Collective Farm: The Case of Dahe Commune. **AU** Burkett, John P.; Putterman, Louis.

Queen, Maggie

PD February 1987. **TI** Mortality Tables for Firms: Predicting Survival with Market Indicators. **AU** Queen, Maggie; Roll, Richard. **AA** Queen: University of California, Los Angeles. Roll: University of California, Los Angeles and Goldman Sachs & Co. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 4-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 33. **PR** $2.00; checks payable to U.C. Regents. **JE** L11, L16, G33. **KW** Firm Size. Industrial Organization. Market Structure.

AB Market data are used to predict firm survival. Capitalization, (i.e., size), is an effective predictor of survival. End-of-year price, total return in a previous period, and volatility of return are useful predictors for different types of mortality. "Beta" is less useful than any of the other variables. There are major differences between univariate predictions, using each variable by itself, and multivariate predictions, using all variables at once. Mortality from all causes is surprisingly high. A firm in the smallest size decile has about even odds of disappearing within a single decade. Firms in the largest size decile display mortality rates of about twenty percent over two decades. Unlike human mortality, firm mortality can be a good thing for investors, such as when a firm expires because it has been acquired in a merger. Market data are used to predict both favorable and unfavorable mortality separately.

Raki, M.

TI Structural Adjustment and the Peasantry in Morocco: A Computable Household Model Approach. **AU** de Janvry, Alain; Fafchamps, M.; Raki, M.; Sadoulet, E.

Rausser, Gordon C.

PD February 1990. **TI** World Commodity Prices: The Role of External Debt and Industrial Country Policies. **AU** Rausser, Gordon C.; Rose, Marjorie B.; Irwin, Douglas A. **AA** Rausser: University of California, Berkeley. Rose: International Monetary Fund. Irwin: Board of Governors of the Federal Reserve System. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 516; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 46. **PR** $9.20. **JE** F13, Q17, F14, O57. **KW** Commodity Prices. External Debt. Trade Policy. Commercial Policy. Developing Countries. Agriculture.

AB The domestic support of and protectionist policies toward agriculture in major Organization for Economic Cooperation and Development (OECD) countries has been partly responsible for surplus commodity production and sagging international commodity prices in recent years. Between 1980 and 1987, the International Monetary Fund (IMF) food commodities price index fell by one third in nominal terms and by almost one half in real terms. Although originally undertaken largely for domestic reasons, these policies have led to trade restraints and export subsidies that have reduced prices and aggravated instability in international commodity markets. Attempts to reform policies in OECD countries via General Agreement on Tariffs and Trade (GATT) negotiations or other means have led to only modest changes in world commodity production and trade patterns.

TI Organizational Equilibrium and the Optimality of Collective Action. **AU** Zusman, Pinhas; Rausser, Gordon C.

TI Policy Preference Functions: Grand Themes and New Directions. **AU** Love, H. Alan; Rausser, Gordon C.;Burton, Diana M.

TI Price-Distorting Compensation Serving the Public Interest. **AU** Foster, William E.; Rausser, Gordon C.

PD July 1990. **TI** Linkages among Commodity Futures Markets and Dynamic Welfare Analysis. **AU** Rausser, Gordon C.; Walraven, Nicholas A. **AA** Rausser: University of California, Berkeley. Walraven: Federal Reserve System. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 572; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 23. **PR** $5.00. **JE** G13, G14, G15. **KW** Futures Trading. Futures Markets. Dynamic Welfare Analysis. Commodities.

AB This study constructs dynamic welfare measures for a system of futures markets that express the allocative efficiency of a particular market as a function of its accuracy and speed of adjustment following a shock to the system. The system comprises futures prices for T-bills, exchange rates (German mark, British pound, Canadian dollar and yen), and agricultural commodities (corn, wheat, and cotton) for delivery in 1981 and 1982. The results suggest that, although agricultural, exchange, and financial markets all over-react to a disturbance, agricultural markets do so to a much greater degree. Owing to their much greater size, however, the welfare loss arising from the overshooting is likely to be much larger for interest rate and exchange markets.

PD August 1990. **TI** Implications of the Structural Adjustment Experience in the Developing World for Eastern Europe: Discussion. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 568; Department of Economics, 207 Giannini Hall,

University of California, Berkeley, CA 94720. **PG** 10. **PR** $5.00. **JE** P51, P23, Q13. **KW** Structural Adjustment. Economic Policy. Economic Reform. Market Economy. Communism. Agriculture.

AB Communism has failed. In the aftermath of last year's extraordinary events, it is clear that the ideological appeal of communist political systems has been irrevocably damaged. Throughout much of Eastern Europe and the donor community, there is a clear vision of where each country wants to "arrive"; unfortunately, there are few clues about the path that should be traveled to get from "here" to "there." Dr.Csaki informs us that the most important task is to develop a market-oriented and competitive agricultural structure. Yes, but how! To be sure, some individual policies that have formed the basis for successful market economies, if introduced with the wrong timing or in isolation from other reforms, can make an inefficient economy performance even worse.

TI The Political Economy of Productive and Predatory Policies: A Case Study from Agriculture. **AU** de Gorter, Harry; Nielson, David J.; Rausser, Gordon C.

TI Mobility, Diversification, and Compensation in Trade Reform. **AU** Foster, William E.; Gray, Richard; Rausser, Gordon C.

PD August 1990. **TI** Public Goods and Wealth Transfer Tradeoffs. **AU** Rausser, Gordon C.; Foster, William E. **AA** Rausser: University of California, Berkeley. Foster: North Carolina State University, Raleigh. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 549; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 25. **PR** $5.00. **JE** Q11, Q18, Q13. **KW** Subsidies. Taxes. Income Distribution. Agricultural Policy.

AB Governments use many forms of subsidies and taxes to transfer wealth between economic groups, in particular between agricultural producers, and consumers and taxpayers. Most interventions are nonneutral with respect to production, altering price signals facing firms, and distorting market prices; a few are relative neutral, approximating lump-sum payments, and leaving output and input prices only mildly affected. From a standpoint of economic efficiency, distorting (or coupled) policies are widely criticized, and nondistorting (or decoupled) policies wildly supported. Nevertheless the reliance by governments on distorting interventions is commonplace and largely impervious to reform. In order to understand both governmental intervention in agricultural markets and the constraints to policy reforms, political economic analysis must address two questions. The first regards the preference of distorting over nondistorting policies. The second regards the choice of the particular form of distorting policy; that is, the choice of the specific output or input markets that will carry the distorting taxes or subsidies.

TI Modeling Policy Reform in the U.S. Wheat and Feed Grain Sectors. **AU** Just, Richard E.; Rausser, Gordon C.; Zilberman, David.

TI Farmer Behavior under Risk of Failure. **AU** Foster, William E.; Rausser, Gordon C.

TI Compensation and Political Feasibility: Facilitating Welfare Improving Policies. **AU** Just, Richard E.; Rausser, Gordon C.; Zilberman, David.

TI Coalition Breaking and Policy Reform. **AU** Foster, William E.; Rausser, Gordon C.

Raut, Lakshmi

PD February 1991. **TI** Endogenous Fertility, Technical Change and Growth in a Model of Overlapping Generations. **AU** Raut, Lakshmi; Srinivasan, T. N. **AA** Raut: University of California, San Diego. Srinivasan: Yale University. **SR** Yale Economic Growth Center Discussion Paper: 628; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven, CT 06520. **PG** 33. **PR** $2.00 + postage. **JE** J13, O15, O41. **KW** Fertility. Technical Change. Growth. Human Capital.

AB The consequences of private reproduction and capital (physical and human) accumulation decisions to long-run economic development have been the focus of recent research. The earlier literature on the rate of growth of population, labor force and human capital were assumed to be exogenous. The recent literature, in contrast, explicitly recognizes their endogeneity. In addition, greater emphasis is placed on human as contrasted with physical capital in the growth process.

Reiter, Stanley

PD 1990. **TI** Decentralized Dynamic Processes for Finding Equilibrium. **AU** Reiter, Stanley; Simon, Carl. **AA** Reiter: Northwestern University. Simon: University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 90-20; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 25. **PR** not available. **JE** C63, C61, C87. **KW** Dynamic Model. Algorithms.

AB This paper describes a class of decentralized dynamic processes designed to converge to equilibrium when the equilibrium equations are linear. These processes can also be viewed as distributed algorithms for solving systems of linear equations, or as learning algorithms. The class includes processes that use a message space larger by one binary digit than the space in which the equilibrium exists. However, memory and time requirements increase exponentially with the number of agents (equations).

Reitzes, James D.

PD January 1991. **TI** Quality Choice, Trade Policy, and Firm Incentives. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 183; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 47. **PR** no charge. **JE** F12, F13, L52, L15. **KW** Oligopoly. Product Quality. Trade Policy. Trade Model.

AB We examine quality choice in a duopoly model with one foreign and one domestic firm, where consumers show similar preferences for quality but different preferences for brands. Firms set quality prior to choosing price; and the interaction between firms and policy-makers assumes several forms. Our conclusions differ depending on whether firms face "set-up" costs in establishing higher quality levels. When these costs are absent, both domestic and foreign firms typically set quality at socially optimal levels. When these costs are present, the foreign firm [and often the domestic firm] sets quality below the socially optimal level. These results change when firms use their quality choices to signal cost information to policy-makers or rivals.

Riddell, W. Craig

TI Economic Issues Pertaining to Pay Equity. **AU** Gunderson, Morley; Riddell, W. Craig.

TI Comparable Worth: The Canadian Experience. **AU** Gunderson, Morley; Riddell, W. Craig.

TI The Measurement of Labour Force Dynamics with the Labour Market Activity Survey: The LMAS Filter. **AU** Jones, Stephen R. G.; Riddell, W. Craig.

Rietz, Thomas

TI An Experimental Study of Voting Rules and Polls in Three-Way Elections. **AU** Forsythe, Robert; Myerson, Roger E.; Rietz, Thomas; Weber, Robert.

Riezman, Raymond

TI Initial versus Continuing Proposal Power in Legislative Seniority Systems. **AU** McKelvey, Richard D.; Riezman, Raymond.

Rizzo, John A.

TI Are Bank Loans Unique? The Case of Hospital Debt Financing. **AU** Calem, Paul S.; Rizzo, John A.

TI Financing Constraints and Investment: New Evidence from the U.S. Hospital Industry. **AU** Calem, Paul S.; Rizzo, John A.

Rizzo, Mario J.

TI The Genetic-Causal Moment in Economic Theory. **AU** Cowan, Robin A.; Rizzo, Mario J.

Rob, Rafael

TI The Roles of Public Information and Preplay Communication in Evolutionary Games. **AU** Matsui, Akihiko; Rob, Rafael.

Roberts, Mark J.

TI Wages and the Risk of Plant Closings. **AU** Dunne, Timothy; Roberts, Mark J.

Robertson, Donald

PD July 1991. **TI** Output, Inflation and the ERM. **AU** Robertson, Donald; Symons, James. **AA** Robertson: London Business School. Symons: University College London and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 43; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 25. **PR** no charge. **JE** E31, E32, F41. **KW** Inflation. Business Cycle. Economic Fluctuations.
AB We examine the recent output and inflation performance of OECD countries. We find only weak evidence that, across countries, ERM membership implied a worse output growth and inflation performance in the eighties than for countries not in the ERM. Rather we find high inflation countries benefited, low inflation countries suffered. Once established, we find that the ERM did eventually provide macroeconomic benefits for member countries in the form of a 23% reduction in output variability and a 30% reduction in inflation variability.

PD July 1991. **TI** Some Strange Properties of Panel Data Estimators. **AU** Robertson, Donald; Symons, James. **AA** Robertson: London Business School. Symons: University College London. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 44; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 27. **PR** no charge. **JE** C23, C15. **KW** Panel Data. Monte Carlo. Bias. Parameter Estimation.
AB We study the biases that are likely to arise in practice with panel data when parameters vary across individuals, but this is not allowed for in estimation. We consider both stationary and nonstationary regressors. We find that biases can be severe for relatively small parameter variation, and that this problem is hard to detect. We study in some detail by Monte Carlo the performance of the Anderson-Hsiao estimator in the presence of this particular misspecification.

Robinson, Sherman

TI Policy Lessons from Two-Sector Models. **AU** Devarajan, Shantayanan; Lewis, Jeffrey D.; Robinson, Sherman.

Rodseth, Asbjorn

PD June 1991. **TI** Efficiency Wages and Local versus Central Bargaining. **AA** University of Oslo and London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 29; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 22. **PR** no charge. **JE** J41, J31, J51, J53. **KW** Wages. Employment. Collective Bargaining. Unions.
AB In a simple efficiency wage model an employers' confederation always wants a lower wage than the individual employers. A centralized union normally wants a lower wage than local unions if the demand for labor in efficiency units is elastic, a higher wage if it is inelastic. Local unions which are willing to accept a reduction in the total wage bill to increase employment, wants lower wages than their employers. In the long-run wages per efficiency unit of labor are independent of the bargaining system, while there is a trade-off between high employment and high hourly wages.

Roll, Richard

TI Mortality Tables for Firms: Predicting Survival with Market Indicators. **AU** Queen, Maggie; Roll, Richard.

PD December 1987. **TI** R Squared. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 1-88; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 32. **PR** $2.00; checks payable to U.C. Regents. **JE** G12, G14. **KW** Stock Prices. Stock Market. Private Information. Market Efficiency.
AB Even with hindsight, the ability to explain stock price changes is modest. R squared values were calculated for the returns of large stocks as explained by systematic economic influences, by the returns on other stocks in the same industry, and by public firm specific news events. The average adjusted R squared is only about .35 with monthly data and .20 with daily data. There is little relation between explanatory power and either the firm's size or its industry. There is little improvement in the R squared from eliminating all dates surrounding news reports in the financial press. However, the sample kurtosis is quite different when such news events are

eliminated, thereby revealing a mixture of return distributions. Non-news dates also indicate the presence of a distributional mixture, perhaps due to traders acting on private information.

Roller, Lars-Hendrik

TI Economies of Scale and Scope in the French Mutual Funds (SICAV) Industry. **AU** Dermine, Jean; Roller, Lars-Hendrik.

Rose, Andrew K.

PD April 1991. **TI** Expected and Predicted Realignments: The FF/DM Exchange Rate during the EMS. **AU** Rose, Andrew K.; Svensson, Lars E. O. **AA** Rose: University of California, Berkeley. Svensson: Stockholm University. **SR** Board of Governors of the Federal Reserve System International Finance Discussion Papers: 395; Division of International Finance, Board of Governors of the Federal Reserve System, Washington, DC 20551. **PG** 37. **PR** no charge. **JE** F31, F33, E42. **KW** Exchange Rate. Target Zone. Devaluation. European Monetary System.

AB An empirical model of time-varying realignment risk in an exchange rate target zone is developed. Expected rates of devaluation are estimated as the difference between interest rate differentials and estimated expected rates of depreciation within the exchange rate band, using French Franc/Deutsche Mark data during the European Monetary System. The behavior of estimated expected rates of depreciation accord well with the theoretical model of Bertola-Svensson (1990). We are also able to predict actual realignments with some success.

PD July 1991. **TI** Expected and Predicted Realignments: The FF/DM Exchange Rate During the EMS. **AU** Rose, Andrew K.; Svensson, Lars E. O. **AA** Rose: Board of Governors, Federal Reserve System. Svensson: Institute for International Economic Studies, University of Stockholm. **SR** CEPR Discussion Paper: 552; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 40. **PR** Pounds 3.00 or $5.00. **JE** F31, F33. **KW** Exchange Rate. Target Zone. Realignment. Devaluation. European Monetary System.

AB An empirical model of time-varying realignment in an exchange rate target zone is developed. Expected rates of devaluation are estimated as the difference between interest rate differentials and estimated expected rates of depreciation within the exchange rate band, using French franc/Deutschmark data during the European Monetary System. The behaviour of estimated expected rates of depreciation accord well with the theoretical model of Bertola-Svensson (1990). We are also able to predict actual realignments with some success.

Rose, Marjorie B.

TI World Commodity Prices: The Role of External Debt and Industrial Country Policies. **AU** Rausser, Gordon C.; Rose, Marjorie B.; Irwin, Douglas A.

Rosen, Sherwin

PD November 1990. **TI** Contracts and the Market for Executives. **AA** University of Chicago. **SR** Economics Research Center/NORC Discussion Paper: 90-12; Economics Research Center/NORC, 6030 S. Ellis, Chicago, Illinois 60637. **PG** 52. **PR** $2.00; send requests to Librarian, NORC. **JE** J44, J31. **KW** Compensation. Wages. Occupations.

AB The paper reviews empirical findings on executive compensation in light of marginal productivity and contract theories. The executive labor market performs three functions. First, control must be distributed and assigned among executives. Second, executive contracts must provide incentives for managers to act in the interests of shareholders.

Rothengatter, Werner

PD April 1990. **TI** Setting Priorities for High Speed Rail Investments. **AA** Universitat Karlsruhe. **SR** Queen's John Deutsch Institute Discussion Paper: 15; c/o Department of Economics, Queen's University, Kingston, Ontario, CANADA K7L 3N6. **PG** 35. **PR** $3.00 Canada and U.S.; $3.50 Foreign. **JE** L91, R41. **KW** Railroads. Transportation System.

AB The problem of setting priorities for high-speed rail investments involves many decision levels. It is shown in which way the priority setting problem is solved in the W. German federal transport infrastructure investment plan and which extensions are necessary to improve the rationality of the method in the case of high-speed railpay or Maglev projects. A sophisticated priority setting model has been developed and the results of this model are compared with the results of conventional cost-benefit analysis. The empirical research comprises 8 important high-speed rail projects in W. Germany. The result is that the sophisticated model leads to improved and more plausible investment programs because it considers the multiple interdependences which are intrinsic to a rail network and to its development over time.

Rubin, Laura S.

PD May 1991. **TI** Productivity and the Public Capital Stock: Another Look. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Economic Activity Section Working Paper Series: 118; Board of Governors of the Federal Reserve System, Economic Activity Section, Stop #80, Federal Reserve Board, Washington, D.C. 20551. **PG** 18. **PR** no charge. **JE** O47, H54, L60. **KW** Productivity. Infrastructure. Capital Investment. Manufacturing.

AB Throughout the past decade there has been a growing awareness about the deterioration of the nation's public capital stock. Aschauer has tried to link this to the slowdown in the growth of productivity in the 1970's and 1980's. However, most analysts treat his findings with considerable skepticism. This paper looks at the underlying determinants of public capital investment, in particular, the growth in the school-age population, to assess the role of public capital in spurring productivity. We conclude that the relationship between productivity and the public capital stock is spurious. We also test the relationship for 11 manufacturing industries and find it significant in only one.

Rudebusch, Glenn D.

TI Have Postwar Economic Fluctuations been Stabilized? **AU** Diebold, Francis X.; Rudebusch, Glenn D.

Rudin, Jeremy R.

PD May 1991. **TI** The Policy Analysis Problem in Macroeconomics. **AA** University of British Columbia and Queen's University. **SR** University of British Columbia Department of Economics Discussion Paper: 91-26; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA.

PG 35. **PR** not available. **JE** E63, D78. **KW** Rational Expectations. Policy Analysis. Government Policy.
AB Logical inconsistencies often arise when policy analysis is conducted under rational expectations because recommendations to change policy are derived from models in which policy changes are not possible. This paper proposes a simple resolution to this problem: include the basic presumption of policy analysis - that the analyst knows something that the government does not - explicitly in the model. It is shown that policy analysis remains a non-trivial problem under this assumption when the government faces a precommitment problem. It is also shown that assuming that private agents believe that policy will never change may lead to misleading results even if policy changes are very rare.

PD July 1991. **TI** Deficit Sustainability: A Simple Test. **AU** Rudin, Jeremy R.; Smith, Gregor W. **AA** Rudin: University of British Columbia and Queen's University. Smith: Queen's University. **SR** University of British Columbia Department of Economics Discussion Paper: 91-25; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 20. **PR** not available. **JE** H62, H63, E62. **KW** Deficits. Government Spending. Fiscal Policy.
AB This paper develops and implements a new test of the sustainability of government deficits. The test is based on the ratio of the growth rate of the market value of the government debt and the nominal interest rate. This test has a number of advantages. First, it is simple. Second, it uses relatively few auxiliary hypotheses. In particular, it is not necessary to assume that the real interest rate is constant or has a constant one-step ahead forecast, to pretest for the order of integration of any of the variables, or to identify the true time series model of any of the variables. The test is applied to U.S. and Canadian federal government debt and deficits using a number of data sets that have been analyzed in published work in this area.

Rustichini, Aldo

TI A Theory of Stopping Time Games with Applications to Product Innovations and Asset Sales. **AU** Dutta, Prajit K.; Rustichini, Aldo.

TI (s,S) Equilibria in Stochastic Games with an Application to Product Innovations. **AU** Dutta, Prajit K.; Rustichini, Aldo.

Ruttan, Vernon W.

TI Induced Technical Change in Centrally Planned Economies. **AU** Fan, Shenggen; Ruttan, Vernon W.

Sadoulet, E.

TI Structural Adjustment and the Peasantry in Morocco: A Computable Household Model Approach. **AU** de Janvry, Alain; Fafchamps, M.; Raki, M.; Sadoulet, E.

TI Peasant Household Behavior with Missing Markets: Some Paradoxes Explained. **AU** de Janvry, Alain; Fafchamps, M.; Sadoulet, E.

Sala-i-Martin, Xavier

TI Convergence across States and Regions. **AU** Barro, Robert J.; Sala-i-Martin, Xavier.

Salant, Stephen W.

TI Price Discrimination and Intertemporal Self-Selection. **AU** Bagnoli, Mark; Salant, Stephen W.; Swierzbinski, Joseph E.

PD October 1990. **TI** For Sale by Owner: When to Use a Realtor and How to Price the House. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 90-14; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 13. **PR** not available. **JE** L85, R31. **KW** Housing. Housing Markets. Real Estate.
AB A home owner wishing to sell his house can either utilize the services of a realtor or, alternatively, can attempt to sell the house himself. If a realtor is eventually engaged, the question naturally arises as to how the house should be re-priced. On the one hand, the realtor may argue that it would be irrational to raise the asking price since no buyer had been found at the lower price when the owner was selling it himself. Finally, there remains the question of whether it is ever optimal to lower the asking price when the realtor is retained. The purpose of this paper is to construct a tractable model which can be used to address these somewhat subtle pricing issues.

Samiei, Hossein

TI Estimating Limited-Dependent Rational Expectations Models: With an Application to Exchange Rate Determination in a Target Zone. **AU** Pesaran, M. Hashem; Samiei, Hossein.

Samuelson, Larry

TI Evolutionary Stability in Repeated Games Played by Finite Automata. **AU** Binmore, Ken; Samuelson, Larry.

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

Saunders, Anthony

TI When Does the Prime Rate Change? **AU** Mester, Loretta J.; Saunders, Anthony.

TI Who Changes the Prime Rate? **AU** Mester, Loretta J.; Saunders, Anthony.

Scarf, Herbert E.

PD February 1991. **TI** Economic Equilibrium and Soviet Economic Reform. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 969; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 40. **PR** $2.00. **JE** P22, P23, P51, O53. **KW** Socialism. Scale Economies. General Equilibrium. Market Structure. Prices. Price Theory.
AB The paper, prepared for a Roundtable on Major Economic Problems in the U.S. and the U.S.S.R., discusses some aspects of price theory -- in particular, the theory of general equilibrium -- which may offer some theoretical insights about the economic problems to be encountered during the transition from Socialism to private markets in the Soviet Union.

Schaffer, Mark

TI A New Method of Long-Run Growth Accounting with Application to the Soviet Economy 1991 and the U.S. Economy 1928-87. **AU** Gomulka, Stanislaw; Schaffer, Mark.

Schankerman, Mark

PD July 1991. **TI** How Valuable is Patent Protection? Estimates by Technology Field using Patent Renewal Data. **AA** London School of Economics and National Bureau of Economic Research. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 46; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 58. **PR** no charge. **JE** D23, O32. **KW** Property Rights. Patents. Technology.

AB This paper presents quantitative estimates of the private value of property rights conferred by patent protection for different technology fields and countries of ownership. The measures are derived from parametric estimation of a model of patent renewal, using a new data set on patent renewals in France during the period 1969-1987. The results show that patent protection is a significant, but not the major, source of private returns to inventive activity and that its importance varies sharply across technology fields. The paper quantifies the equivalent subsidy to R&D generated by the patent system, characterizes variations in the value of patent rights across technology fields, countries of ownership and time, and explores the determinants of those differences.

Scherer, F. M.

PD March 1991. **TI** R&D Reactions to High-Technology Import Competition. **AU** Scherer, F. M.; Huh, Keun. **AA** Scherer: Harvard University. Huh: Samsung Economic Research Institute. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 91-2; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 37. **PR** no charge. **JE** L60, O32, O19, F23. **KW** Competition. R&D. Manufacturing. International Trade. Imports.

AB For a seventeen-year panel covering 308 U.S. manufacturing corporations, we analyze firms' R&D spending reactions to changes in high-technology imports. On average, companies reduced their R&D/sales ratios in the short-run as imports rose. Individual company reactions were heterogeneous, especially for multinational firms. Short-run reactions were more aggressive (i.e., tending toward R&D/sales ratio increases), the more concentrated the markets were in which the companies operated, the larger the company was, and the more diversified the firm's sales mix was. Reactions were less aggressive when special trade barriers had been erected or patent protection was strong in the impacted industries. Companies with a top executive officer educated in science or engineering were more likely to increase R&D/sales ratios in response to an import shock, all else equal. Over the full 17-year sample period, reactions may have shifted toward greater average aggressiveness.

Schmeidler, David

TI Updating Ambiguous Beliefs. **AU** Gilboa, Itzhak; Schmeidler, David.

Schmidt, Peter

TI Testing the Null Hypothesis of Stationarity Against the Alternative of a Unit Root: How Sure are We that Economic Time Series have a Unit Root? **AU** Kwiatkowski, Denis; Phillips, Peter C. B.; Schmidt, Peter.

Schmitt, John

PD June 1991. **TI** A Test of the Effect of Benefits on Search Activity in a Model of Endogenous Job Offer Arrivals. **AU** Schmitt, John; Wadsworth, Jonathan. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 38; Centre for Economic Performance, London School of Economics, Houghton Street, London WC2A 2AE, UNITED KINGDOM. **PG** 36. **PR** no charge. **JE** J64, J65. **KW** Unemployment Benefits. Search Model. Unemployment.

AB This paper endogenizes the job offer arrival rate in a standard search model in order to test the hypothesis that unemployment-related benefits may affect the job search behavior of unemployed workers independently of any reservation wage effect. Using a pooled cross-section of 1484 unemployed British men from the 1979 to 1982 General Household Surveys, we find that the level of benefit has no significant effect on unemployed search behavior. Factors which do have an important impact on search activity include: age, unemployment duration, occupation, and education level. Further, local labor market conditions affect only the job search behavior of the short-term unemployed.

Schmitz, Andrew

PD November 1990. **TI** Trade Liberalization in the World Sugar Market: Playing on a Level Field? **AU** Schmitz, Andrew; Vercammen, James. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 563; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 58. **PR** $11.60. **JE** Q11, Q17, F13. **KW** Trade Liberalization. Sugar. Prices. Quotas. Free Trade. Trade Policy. Agriculture.

AB The costs and benefits of the U.S. sugar program have historically been estimated with reference to a "world price." This price is highly distorted because of extensive government intervention in sugar markets around the world. The effect of U.S. quotas depends on the level of the world price relative to the U.S. producer price. Under free trade, the effect of a quota would be different than under distorted trade since free trade will raise world prices. Several studies have estimated the effects of free trade in sugar, and they all show a rise in the world price. These models, however, generally do not allow for free trade by the Soviet Union and China where it is assumed that trade remains unchanged or that imports are reduced in response to higher world prices brought about by trade liberalization by such blocs as the European Community.

Scholz, John Karl

TI Intergenerational Transfers and the Accumulation of Wealth. **AU** Gale, William G.; Scholz, John Karl.

Schwab, Robert M.

TI Measuring Peer Group Effects: A Study of Teenage Pregnancy. **AU** Evans, William N.; Oates, Wallace E.; Schwab, Robert M.

Schwartz, Eduardo S.

TI Optimal Arbitrage Strategies under Basis Variability. **AU** Brennan, Michael J.; Schwartz, Eduardo S.

TI Arbitrage in Stock Index Futures. **AU** Brennan,

Michael J.; Schwartz, Eduardo S.

TI Time Invariant Portfolio Insurance Strategies. **AU** Brennan, Michael J.; Schwartz, Eduardo S.

TI Portfolio Insurance and Market Volatility. **AU** Brennan, Michael J.; Schwartz, Eduardo S.

PD November 1987. **TI** Valuing the Implicit Guarantee of the Federal National Mortgage Association. **AU** Schwartz, Eduardo S.; Van Order, Robert. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 12-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 25. **PR** $2.00; checks payable to U.C. Regents. **JE** G33, G12. **KW** Bankruptcy. Stock Prices. Private Debt. Mortgages.

AB This paper is a preliminary attempt at analyzing the pricing of the implicit guarantee of debt issued by the Federal National Mortgage Association (FNMA). We do this by applying a contingent claims model, viewing the guarantee as a put option, giving holders of FNMA debt the right to sell their debt to the guarantor in the event of bankruptcy; and we model equity in the firm as a call on the firm's assets at a price equal to the value of the (guaranteed) liabilities. Because both the debt and the assets are risky we use an extension of the standard Black-Scholes (1973) model, developed by Margrabe (1978), to analyze options to exchange one risky asset for another. We then use the model to analyze what FNMA stock price reveals about what traders are assuming about the guarantee and about how the guarantee is exploited.

Senbet, Lemma W.

TI Risk-Shifting Incentives of Depository Institutions: A New Perspective on Federal Deposit Insurance Reform. **AU** John, Kose; John, Teresa A.; Senbet, Lemma W.

Senhadji-Semlali, Abdel

TI The Fallacy of Composition Argument: Does Demand Matter for LDC Manufactured Exports?. **AU** Faini, Riccardo; Clavijo, Fernando.; Senhadji-Semlali, Abdel.

Shaffer, Greg

TI Vertical Control in Markets with Multilateral Competition. **AU** O'Brien, Daniel P.; Shaffer, Greg.

PD March 1991. **TI** Capturing Strategic Rent: Full-Line Forcing, Maximum Resale Price Maintenance, Brand Discounts and Aggregate Rebates. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory Working Paper: 91-8; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 15. **PR** not available. **JE** L12, L81, M31, L52. **KW** Retail Market. Marketing. Monopoly.

AB This paper examines the implications of a retailer's shelf space stocking decisions on the optimal marketing strategies of an upstream multi-product monopolist. When the retailer's opportunity cost of shelf space is known, full-line forcing, brand discounts, and maximum resale price maintenance are sufficient to achieve the monopolist manufacturer's first best profit. When these strategies are adopted, the retailer's profit is reduced to the scarcity rents obtainable on her shelf space. The additional downstream profit to be made by pitting one brand versus another is eliminated. When the retailer's opportunity cost of shelf space is unknown, the use of aggregate rebates can act as a screening device to maximize channel profit.

Shaffer, Sherrill

PD November 1989. **TI** Investing in Conflict. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-4; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 26. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** D74, H56. **KW** Conflict. Bargaining. Nash Equilibrium.

AB Simultaneous investment in pure conflict is considered as a bargaining mechanism in two simple games. A divisible "pie" gives a unique Nash equilibrium corresponding to limited war. An indivisible pie resembles the "battle of the sexes" but has no Nash equilibrium in either pure or mixed strategies.

PD November 1989. **TI** Immunizing Options against Changes in Volatility. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-5; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 23. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** G13, G14. **KW** Transaction Costs. Options. Prices.

AB It is shown that, in the presence of transaction costs, the writer of an option can choose a finite rehedging interval that immunizes the option against small changes or measurement error in the price volatility of the underlying instrument. This result suggests a focal point choice of the rehedging interval, which is necessary for the market price of an option to be well defined.

Shapiro, Alan C.

TI Cross Sectional Regularities in the Response of Stock Prices to Bond Rating Changes. **AU** Cornell, Bradford; Landesman, Wayne; Shapiro, Alan C.

Sharma, Sunil

TI Employment Duration and Industrial Labor Mobility in the United States. 1880-1980. **AU** Jacoby, Sanford M.; Sharma, Sunil.

Shepard, Andrea

PD January 1991. **TI** Contractual Form, Retail Price, and Asset Characteristics. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology Department of Economics Working Paper: 569; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 35. **PR** $6.00 Domestic, $8.00 Overseas, $2.00 Student. **JE** L81, L22, L21, L23. **KW** Contracts. Vertical Integration. Industrial Organization.

AB Predictions derived from a principal-agent analysis of the manufacturer-retailer relationship are derived and tested using microdata on contractual form, outlet characteristics and retail prices for gasoline stations in Eastern Massachusetts. The empirical results are consistent with upstream firms choosing contracts that have strong incentive characteristics but less direct control when asset characteristics make unobservable effort by downstream agents important. Manufacturers trade-off incentive power for more direct control when observable effort

is relatively more important. Retail prices are affected by the identity of the decision-maker and are slightly lower when the upstream firm is allowed to directly control the retail price.

Shiller, Robert J.

PD February 1991. **TI** Arithmetic Repeat Sales Price Estimators. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 971; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 31. **PR** $2.00. **JE** R31, C43. **KW** Price Index. Hedonic Regression. Housing.

AB Repeat sales price estimators are designed to infer price indexes of infrequently sold and unstandardized assets, such as houses, based only on changes in prices of those individual assets that are observed to be sold twice. Repeat sales price estimators are proposed here that are arithmetic, and either value-weighted or equally-weighted. Moreover, variants are proposed that are interval-weighted, i.e., that correct for a form of heteroskedasticity, and that include additional regressors representing changes in hedonic variables. Some of these methods are applied to data on house prices in Atlanta, Chicago, Dallas and San Francisco 1970-1986.

TI Actual and Warranted Relations between Asset Prices. **AU** Beltratti, Andrea E.; Shiller, Robert J.

Shubik, Martin

PD December 1990. **TI** Default and Bankruptcy in a Multistage Exchange Economy. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 963; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 13. **PR** $2.00. **JE** G33, D51. **KW** Bankruptcy. Debt. Credit.

AB Either lending must be secured or otherwise some form of default or bankruptcy rules are required to provide a disincentive against strategic default. When many time periods are involved, the mere specification of a penalty which is sufficient for one period of trade, is not sufficient. The complete specification of even a two period game requires that both the treatment of creditors (including seniority conditions) and the nature of the rehabilitation of the debtor must be specified. This paper explores these problems.

PD December 1990. **TI** A Strategic Market Game with a Mutual Bank with Fractional Reserves and Redemption in Gold (A Continuum of Traders). **AU** Shubik, Martin; Tsomocos, D. P. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 964; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 25. **PR** $2.00. **JE** G33, G21, E51, E43. **KW** Banking. Interest Rates. Bankruptcy. Credit. Money Supply.

AB We utilize the strategic market game approach to analyze the role and function of a mutual bank with variable fractional reserves, redemption in gold and endogenous interest rate formation. We specify the conditions of enough money and its distribution. Using the continuum of traders model, we show existence and optimality for the case of no bankruptcy as well as for the case in which there exists the potentiality of bankruptcy. Finally, we analyze the relationship of the gearing ratio and the bankruptcy penalty with respect to the resulting equilibrium allocations.

Shy, Oz

TI The Environment and International Trade. **AU** Chou, Chien-fu; Melmed-Sanjak, Jolyne; Shy, Oz.

Sichel, Daniel E.

TI Asymmetric Adjustment Costs, Capital Longevity, and Investment. **AU** Bizer, David S.; Sichel, Daniel E.

Sickles, Robin C.

TI Estimation of the Survivor Model by Nonparametric Maximum Likelihood, Maximum Penalized Likelihood and Simulation Based Estimation. **AU** Huh, Keun; Sickles, Robin C.

Siebert, Jerome B.

PD July 1990. **TI** The Potential Impact of the Mediterranean Fruit Fly, Ceratitis Capitata (Wied.), upon Establishment in California: An Update. **AU** Siebert, Jerome B.; Vijay, Pradhan. **AA** University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 547; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 41. **PR** $8.20. **JE** Q11, Q12, Q13. **KW** Fruit Fly. Medfly. Agriculture. Insects. Pesticides.

AB This study has updated a 1981 study that was conducted on the economic impact of establishment of Medfly in California. Many of the same assumptions that went into that study were used in this one. Additionally, some assumptions were updated based on information and data that has been developed and reported since 1981. This study considered many of the same crops as the 1981 study as suitable for Medfly hosts. A total of 22 different commodities were included: Apples, Apricots, Avocados, Bell Peppers, Cherries, Dates, Figs, Grapes, Grapefruit, Kiwis, Limes, Lemons, Mandarin Oranges, Nectarines, Olives, Peaches, Pears, Persimmons, Plums, Prunes, and Tomatoes. The study estimated two basic sets of costs: 1) the cost of controlling Medfly in the field through increased pesticide application, and 2) the cost of post harvest treatments to comply with quarantine regulations in order to ship out-of-state.

Simchony, T.

TI Linear and Nonlinear Associative Memories for Parameter Estimation. **AU** Kalaba, Robert; Lichtenstein, Z.; Simchony, T.; Tesfatsion, Leigh.

Simon, Carl

TI Decentralized Dynamic Processes for Finding Equilibrium. **AU** Reiter, Stanley; Simon, Carl.

Simpson, John David

PD January 1991. **TI** Do Employees Regard Wage Cuts and Layoffs as Opportunistic? **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 185; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Washington, D.C. 20580. **PG** 23. **PR** no charge. **JE** J41, J33, J53. **KW** Layoffs. Pensions. Wages. Employment. Implicit Contracts.

AB This paper examines whether workers are less willing to accept defined benefit pension plans (a type of implicit contract) from firms that have reduced either worker compensation or employment. Worker reluctance to accept defined benefit pension plans from these firms suggests that

workers view reductions in compensation and reductions in employment as a breach of an implicit contract. Therefore, a switch from a defined benefit to a defined contribution plan or to no pension plan can be viewed as a proxy for worker distrust of the firm.

Siniscalco, Domenico

TI Environmental Innovation Policy and International Competition. **AU** Carraro, Carlo; Siniscalco, Domenico.

Siow, Aloysius

TI On the Job Screening, Up or Out Rules, and Firm Growth. **AU** O'Flaherty, Brendan; Siow, Aloysius.

TI Up or Out Rules in the Market for Lawyers. **AU** O'Flaherty, Brendan; Siow, Aloysius.

Slade, Margaret E.

PD January 1991. **TI** Demand for Energy and Nonfuel Minerals: Final, Derived, and Speculative. **AU** Slade, Margaret E.; Kolstad, Charles; Weiner, Robert. **AA** Slade: University of British Columbia. Kolstad: University of Illinois. Weiner: Brandeis University. **SR** University of British Columbia Department of Economics Discussion Paper: 91-05; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 15. **PR** not available. **JE** Q32, Q41, Q31. **KW** Energy Demand. Energy. Commodities. Natural Resources. Minerals.

AB This paper summarizes and synthesizes previous studies of energy and nonfuel mineral demand. It also attempts to point to areas that have received inadequate attention and where, as a consequence, our understanding is poorest. We first consider demand from a conventional point of view. That is, we look at consumption of minerals by firms and households and discuss issues that demand models must confront. These include estimating substitution possibilities, modeling technical change and scale effects, handling disequilibrium and rationing, and dealing with dynamic adjustment to changed or uncertain market conditions.

Smith, Clifford W., Jr

TI Ownership Structure across Lines of Property-Casualty Insurance. **AU** Mayers, David; Smith, Clifford W., Jr.

Smith, Gregor W.

TI Deficit Sustainability: A Simple Test. **AU** Rudin, Jeremy R.; Smith, Gregor W.

Smith, Roy C.

PD 1990. **TI** Wall Street Ethics Today. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: S-90-27; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 18. **PR** $5.00. **JE** K22, K42, M21. **KW** Financial Markets. Ethics. Stock Market. Securities.

AB During the Vietnam War President Lyndon Johnson was reportedly asked how difficult it was for the U.S. to stand up for its principles and do "the right thing" over there. "Hell," he replied, "doing the right thing is easy. It's knowing what the right thing is that's the difficult part." During the last few years it has become apparent that many American businessmen and financiers from Wall Street have had trouble knowing what the right thing was.

PD 1990. **TI** Economic Restructuring in Europe and the Market for Corporate Control. **AU** Smith, Roy C.; Walter, Ingo. **AA** Smith: New York University and Goldman, Sachs & Company. Walter: New York University and INSEAD. **SR** New York University Salomon Brothers Center Working Paper: S-90-30; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 41. **PR** $5.00. **JE** F15, F14, F43. **KW** European Community. Economic Integration. Private Sector.

AB In 1985 the EC Commission announced its 1992 single market initiatives. To a significant extent these initiatives -- which had been promised at the inception of the Europe Common Market about 30 years earlier but never implemented -- were the result of increasing confidence among European statesmen that deregulated private sector economic activity could produce superior growth performance among the EC countries than would continuation of government income policies and other forms of direct intervention in markets. The renewed confidence in the private sector followed bold but successful economic reforms undertaken in Britain and France, deregulation of financial services, and privatization of an array of government enterprises, including several that had previously been heavily subsidized by the state.

PD 1991. **TI** Reconfiguration of Global Financial Markts in the 1990's. **AU** Smith, Roy C.; Walter, Ingo. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: S-91-12; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 25. **PR** $5.00. **JE** G15, F36, F21, F15. **KW** Financial Markets. International Investment. Economic Integration. Securities.

AB During the 1980's world financial markets experienced change as never before. These were years of explosive growth in all types of financial transactions. The U.S. bond and stock markets entered a boom period early in the decade that continued until nearly its end, alongside a torrent of fnancial innovations and aggressive trading operations. The decade also saw extraordinary growth in the issuance and trading of Euromarket securities, radical deregualtion of financial markets in the U.K. and several other countries. Meanwhile, Japan emerged during the period as the world's most solvent nation, pumping its excess savings into foreign securities, real estate, and control of corporations. In this paper we review the salient financial market developments in Europe, the United States and Japan, and suggest that they represent a confluence of forces that will lead up to "seamless" markets for many securities and derivatives by the end of the 1990's, in much the same way as a seamless market in foreign exchange exists today.

TI Highly Leveraged Restructurings: A Valid Role of Europe. **AU** Altman, Edward I.; Smith, Roy C.

Snower, Dennis J.

TI Segmented Labor Markets and Unemployment. **AU** Lindbeck, Assar; Snower, Dennis J.

Somers, Harold M.

PD July 1991. **TI** Leverage: The Tax Incentives. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 625; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 32. **PR** $2.50; checks payable to U.C. Regents. **JE** H21, H25, H24. **KW** Taxes. Corporate Taxes. Tax Reform. Tax System.

AB This paper discusses calculations that combine the tax burden on corporations with that on equity and debt holders. It points up the great leverage incentives in the tax law. The revisions of 1986 (not significantly changed in 1990) cut the scheduled rates on both corporations and individuals (except for capital gains) and might appear to reduce the incentive for debt finance but they really increased the incentive for debt financing relative to equity financing: the burden on debt financing was reduced relatively more than on equity financing. The result is to tilt the well-worn playing field even more in favor of leveraging, leading to the possibility of another leverage frenzy and debacle at some time in the future.

Spiegel, Yossef

PD July 1991. **TI** The Capital Structure of Regulated Firms. **AU** Spiegel, Yossef; Spulber, Daniel F. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 942; Northwestern University, 2001 Sheridan Road, Evanston, IL 60208-2014. **PG** 27. **PR** $3.00 in the U.S. or Canada; $5.00 via international mail. **JE** L51, G32, G38, L90. **KW** Capital Structure. Regulation. Investment. Public Utilities. Bankruptcy. Debt Financing.

AB The equilibrium price, investment, and capital structure of a regulated firm are examined using a sequential model of regulation. The firm's capital structure is shown to have a significant effect on regulated prices, so that the firm's choice of debt and equity levels reflect regulatory responses. Moreover, debt financing weakens the incentive for regulators to "hold up" the firm so that leveraged firms can invest more than all-equity firms.

Spulber, Daniel F.

PD June 1991. **TI** Efficiency in Bargaining with Information Externalities. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 941; Northwestern University, 2001 Sheridan Road, Evanston, IL 60208-2014. **PG** 32. **PR** $3.00 in the U.S. or Canada; $5.00 via international mail. **JE** C78, D44, D82. **KW** Bargaining. Auction. Asymmetric Information.

AB Bargaining is examined for the situation in which each party has private information regarding their valuation of the good as well as the value of the good to the other party. The k-double auction and the first-and-final offer bargaining game are shown to be inefficient in contrast to the independent private values case. Priority pricing by an informed principal is shown to be interim incentive efficient.

TI The Capital Structure of Regulated Firms. **AU** Spiegel, Yossef; Spulber, Daniel F.

Srinivasan, T. N.

TI Endogenous Fertility, Technical Change and Growth in a Model of Overlapping Generations. **AU** Raut, Lakshmi; Srinivasan, T. N.

Stein, Jerome L.

PD January 1991. **TI** The Economic Determinants of the Distributions of Futures Prices and Trading Volumes. **AA** Brown University. **SR** Brown University Department of Economics Working Paper: 91-2; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 27. **PR** not available. **JE** G13, G14, D83. **KW** Futures Markets. Rational Expectations. Prices. Learning. Expectations.

AB There are four main themes to this paper. First, the distribution of the rate of return, the relation between price variability and volume, and the speed of convergence to Muth Rational Expectations MRE all depend upon the price discovery process. Second, we analyze two price discovery algorithms: OLS and Bayesian learning. Third, when there is Bayesian learning: (a) the short period returns tend to be leptokurtic, but the longer period returns tend to be distributed as the fundamentals; and (b) there is a strong relationship between price variability and volume. Fourth, when there is OLS learning: (a) the returns tend to be distributed as the fundamentals; (b) there is a weak relation between price volatility and volume; and (c) there is the same pattern of convergence to MRE as occurs when there are myopic expectations, which produces the cobweb.

Storcken, Ton

TI Distance Measures for Preference Orderings and Strategy-Proofness of Social Welfare Functions. **AU** Bossert, Walter M.; Storcken, Ton.

Streitwieser, Mary L.

PD August 1990. **TI** The Extent and Nature of Establishment Level Diversification on Sixteen U.S. Manufacturing Industries. **AA** Bureau of the Census. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 90-8; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 39. **PR** no charge. **JE** L60, L22, L21, L23. **KW** Manufacturing. Output.

AB This paper examines the heterogeneity of establishments in sixteen manufacturing industries. Basic statistical measures are used to decompose product diversification at the establishment level into industry, firm, and establishment effects. The industry effect is the weakest; nearly all the observed heterogeneity is idiosyncratic to the firm. Establishments within a firm exhibit a significant degree of homogeneity, although the grouping of products differ across firms. With few exceptions, economies of scope and scale in production appear to play a minor role in the establishment's mix of outputs.

Sundaram, Raghu

TI On the Parametric Continuity of Dynamic Programming Problems. **AU** Dutta, Prajit K.; Majumdar, Mukul; Sundaram, Raghu.

Svensson, Lars E. O.

TI Expected and Predicted Realignments: The FF/DM Exchange Rate during the EMS. **AU** Rose, Andrew K.; Svensson, Lars E. O.

TI Expected and Predicted Realignments: The FF/DM Exchange Rate During the EMS. **AU** Rose, Andrew K.; Svensson, Lars E. O.

Sweeney, James L.

PD January 1990. **TI** Price Oscillations in Oligopoly. **AU** Sweeney, James L.; Comanor, William S. **AA** Sweeney: Stanford University. Comanor: University of California, Santa Barbara. **SR** Stanford Center for Economic Policy Research Discussion Paper Series: 181; 100 Encina Commons, Stanford University, Stanford CA 94305. **PG** 37. **PR** no charge for members of non-profit institutions, $3.00 otherwise. **JE** D21, E31, L10, L81. **KW** Retail Trade. Gasoline. Price Dynamics. Pricing. Market Structure. Industrial Organization.

AB Many markets display price patterns characterized by repeated gradual declines followed by sudden increases. Such price fluctuations were pervasive in U.S. retail gasoline markets during the late 1960's and early 1970's. These markets displayed a repetitive pattern of slow price declines as one dealer undercut the other, followed by sudden price increases back to the top of the price cycle. Then in August of 1972, as the world oil markets tightened, the retail gasoline price fluctuations abruptly ceased and prices began to follow an increasing trend, for both majors and independents. This paper presents a theoretical model of the existence and cessation of price fluctuations. The model assumes that each firm is independently maximizing its own profit, but that the demand function for each firm depends upon the prices chosen by its rivals.

Swierzbinski, Joseph E.

TI *Price Discrimination and Intertemporal Self-Selection.* **AU** Bagnoli, Mark; Salant, Stephen W.; Swierzbinski, Joseph E.

Swinkels, Jeroen

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

Symons, James

TI An Aggregate Model of the Canadian Labor Market. **AU** Keil, Manfred W.; Symons, James.

TI Output, Inflation and the ERM. **AU** Robertson, Donald; Symons, James.

TI Some Strange Properties of Panel Data Estimators. **AU** Robertson, Donald; Symons, James.

Tan, Guofu

PD June 1991. **TI** Entry and R&D in Procurement Contracting. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-14; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** not available. **PR** not available. **JE** D24, H57, O32, D44. **KW** R&D. Contracting. Auction. Entry.

AB A model of competitive procurement and contracting is presented in this paper. The key features of the model include pre-contract R&D, an endogenous number of homogeneous firms, and sealed-bid auction rules. Both diminishing and constant returns to scale (DRS and CRS) in R&D expenditure technologies are considered. I find that the sealed-bid first-price auction (FPA is equivalent to the second-price auction (SPA) under DRS technology. The Revenue Equivalence Theorem breaks down under CRS because multiple equilibria arise in the R&D stage when SPA is used. However, SPA yields a unique perfect equilibrium given sufficient heterogeneity among potential firms. The free-entry perfect equilibrium is also characterized. The buyer prefers free entry through an appropriate selection of the reservation price. However, free entry is not a social optimum. In fact, under CRS it is socially optimal for only one firm to do all of the R&D and production.

PD July 1991. **TI** Auctioning Procurement Contracts by an Informed Buyer. **AA** University of British Columbia. **SR** University of British Columbia Department of Economics Discussion Paper: 91-24; Department of Economics, University of British Columbia, 997-1873 East Mall, Vancouver, B.C. V6T 1W5 CANADA. **PG** 28. **PR** not available. **JE** D44, D82, H57. **KW** Auction. Procurement. Mechanism Design.

AB In this paper, we study the design of procurement contracts in an independent private-values environment when the buyer is privately informed about his demand for the product being procured. We assume first that both the buyer and potential firms are risk neutral and that the buyer procures variable quantity with a concave benefit function. Using the framework of Myerson (1983), we prove that the optimal procurement mechanism for the informed buyer is to sue a first-price sealed-bid auction (but not a Vickrey auction) in which the buyer announces a downward-sloping demand schedule with a reserve price. Thus, the buyer's private information about his demand is revealed to the suppliers through the contract offer.

Taylor, J. Edward

TI The Use of Farm Level Data for Policy Analysis. **AU** Adelman, Irma; Taylor, J. Edward.

Taylor, Paul

TI Innovation and Export Volumes and Prices: A Disaggregated Study. **AU** Greenhalgh, Christine; Taylor, Paul.; Wilson, Rob.

Tesfatsion, Leigh

TI Nonlocal Automated Sensitivity Analysis. **AU** Kalaba, Robert; Tesfatsion, Leigh.

TI Linear and Nonlinear Associative Memories for Parameter Estimation. **AU** Kalaba, Robert; Lichtenstein, Z.; Simchony, T.; Tesfatsion, Leigh.

Thisse, J. F.

TI Portfolio Selection by Mutual Funds: An Equilibrium Model. **AU** Dermine, Jean; Neven, D.; Thisse, J. F.

Thomas, Charles P.

TI Using External Sustainability to Forecast the Dollar. **AU** Meade, Ellen E.; Thomas, Charles P.

Tirelli, Patrizio

PD July 1991. **TI** Simple Rules for the Open Economy: Evaluating Alternative Proposals. **AU** Tirelli, Patrizio; Vines, David. **AA** Tirelli: Universita Catolica del Sacro Cuore, Milano. Vines: Department of Political Economy,

University of Glasgow. **SR** CEPR Discussion Paper: 534; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 51. **PR** Pounds 3.00 or $5.00. **JE** 311, 321, 431. **KW** Simple Rules. Monetary Policy. Fiscal Policy. Inflation Control. Current Account. Exchange Rates.

AB The paper evaluates some proposals for macroeconomic stabilization in an open economy, which take the form of simple rules. The first rule assigns monetary policy to inflation control and does not require fiscal intervention. The second rule adds fiscal control of a foreign wealth target to the first assignment. In the third proposal the fiscal instrument is assigned to the internal objective and monetary policy controls foreign wealth. The fourth rule differs from the third in that monetary policy stabilizes the exchange rate at its target zone level. Our analysis shows that control rules for open economy models (which include the current account) might be unstable because of the cumulation of debt service obligations, and that the inclusion of fiscal feedback can prevent such instability.

Tirole, Jean

TI Privatization and Incentives. **AU** Laffont, Jean-Jacques; Tirole, Jean.

TI Cost Padding, Auditing and Collusion. **AU** Laffont, Jean-Jacques; Tirole, Jean.

Titman, Sheridan

TI An Explanation for Accounting Income Smoothing. **AU** Trueman, Brett; Titman, Sheridan.

PD July 1986. **TI** An Explanation for Accounting Income Smoothing. **AU** Titman, Sheridan; Trueman, Brett. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 17-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 22. **PR** $2.00; checks payable to U.C. Regents. **JE** D21, M41, G32, L21. **KW** Accounting. Income. Business Finance.

AB It is widely believed that corporate managers often engage in accounting income smoothing. One reason given for this is that managers feel that a firm with a smoother income stream will receive a higher market valuation. While there have been many studies documenting the extent to which income smoothing takes place there have been few studies exploring why a manager might rationally want to smooth his firm's income and why the firm's stock price might rise as a result. It is shown here that an incentive to smooth income arises because such action causes the firm's claimholders to perceive a lower volatility for the firm's cash flows. As a result they will demand a lower rate of return from the firm. This also implies that a smoother income stream will be associated with a higher market value for the firm's shares.

TI The Impact of Performance Based Fees on Pension Fund Management. **AU** Grinblatt, Mark; Titman, Sheridan.

TI A Comparison of Measures of Abnormal Performance on a Sample of Monthly Mutual Fund Returns. **AU** Grinblatt, Mark; Titman, Sheridan.

TI Adverse Risk Incentives and the Design of Performance-Based Contracts. **AU** Grinblatt, Mark; Titman, Sheridan.

PD October 1987. **TI** Valuing Commercial Mortgages: An Empirical Investigation of the Contingent Claims Approach to Pricing Risky Debt. **AU** Titman, Sheridan; Torous, Walter N. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 13-87; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 23. **PR** $2.00; checks payable to U.C. Regents. **JE** G21, E43, E44, R31. **KW** Mortgages. Interest Rates. Housing. Urban Economics.

AB This paper investigates the empirical properties of a contingent claims model of commercial mortgage pricing. We find that, on average, the magnitude of the observed risk premia for a sample of non-prepayable fixed rate bullet mortgages can be explained by the contingent claims model given plausible parameters of the interest rate and building value processes. A significant proportion of period to period changes in the spread between commercial mortgage rates and comparable treasury bond rates are explained by the model. However, the observed risk structure of commercial mortgage rates tends to increase more steeply with increasing maturity than the model risk structure.

TI Mutual Fund Performance: An Analysis of Quarterly Portfolio Holdings. **AU** Grinblatt, Mark; Titman, Sheridan.

Tobin, James

PD January 1991. **TI** The Invisible Hand in Modern Macroeconomics. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 966; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 15. **PR** $2.00. **JE** B22, B31. **KW** Adam Smith. Invisible Hand. Keynes. Macroeconomics. Economic Thought.

AB The Invisible Hand, one of the Great Ideas of history and one of the most influential, is Adam Smith's most important legacy to macroeconomics, as to all economics. It is particularly important today as the ultimate inspiration for the New Classical Macroeconomics and for Real Business Cycle Theory. These are intellectual movements that engage many of the best brains in the profession, especially among younger cohorts and especially in the United States. They dominate the agenda even of theorists and econometricians who are skeptical or hostile to their methods and conclusions.

Toda, H. Y.

PD May 1991. **TI** The Spurious Effect of Unit Roots on Exogeneity Tests in Autoregressions: An Analytical Study. **AU** Toda, H. Y.; Phillips, Peter C. B. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 978; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 32. **PR** no charge. **JE** C32, C51, C52. **KW** Random Walk. Exogeneity. Vector Autoregressions. Unit Roots. Wald Tests.

AB This paper analyzes whether inclusion of a statistically independent random walk in a vector autoregression can result in spurious inference. The problem was raised originally by Ohanian (1988). In a Monte Carlo simulation based on the VAR's estimated by Sims (1980b, 1982), Ohanian found that block exogeneity of the genuine variables with respect to an artificially generated random walk variable was rejected too often. In the present paper we attempt a full analytical study of this problem. It can be shown that if the genuine variables are nonstationary, the Wald statistic for testing the block exogeneity hypothesis does not have the usual asymptotic chi-

square distribution. This result is consistent with Ohanian's finding. Furthermore, the derived asymptotic distribution is free of nuisance parameters so that we can unambiguously determine the effect of including the random walk. Interestingly, it can also be shown that if the genuine variables of the model are stationary, the asymptotic distribution is still chi-square in spite of the inclusion of the random walk.

PD May 1991. **TI** Vector Autoregression and Causality. **AU** Toda, H. Y.; Phillips, Peter C. B. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 977; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 56. **PR** no charge. **JE** C32, C12, C52. **KW** Error Correction Model. Exogeneity. Granger Causality. Vector Autoregression.

AB This paper develops a complete limit theory for Wald tests of Granger causality in levels vector autoregression (VAR's) and Johansen-type error correction models (ECM's) allowing for the presence of stochastic trends and cointegration. Earlier work by Sims, Stock and Watson (1990) on trivariate VAR systems is extended to the general case, thereby formally characterizing the circumstances when these Wald tests are asymptotically valid as chi-square criteria. Our results for inference from unrestricted levels VAR are not encouraging.

Torous, Walter N.

TI Futures Options and the Volatility of Futures Prices. **AU** Ball, Clifford A.; Torous, Walter N.

TI Investigating Security Price Performance in the Presence of Event Date Uncertainty. **AU** Ball, Clifford A.; Torous, Walter N.

TI Valuing Commercial Mortgages: An Empirical Investigation of the Contingent Claims Approach to Pricing Risky Debt. **AU** Titman, Sheridan; Torous, Walter N.

Townsend, Robert M.

TI Computing Multiperiod, Information-Constrained Optima. **AU** Phelan, Christopher; Townsend, Robert M.

PD November 1990. **TI** Understanding the Structure of Village and Regional Economies. **AA** Economics Research Center/NORC. **SR** Economics Research Center/NORC Discussion Paper: 91-2; Economics Research Center/NORC, 1155 E. 60th St., Chicago, Illinois 60637. **PG** 30. **PR** $2.00; send requests to Librarian, NORC. **JE** R13, R12, R11. **KW** Regional Economics. Spatial Development.

AB This paper reports on efforts to understand the structure of poor high risk village and regional economies via an iterative, theory-data-theory-measurement research process. The theory comes from the mechanism design, contract theoretic and general equilibrium, macroeconomic literatures, often blending the two. The data comes from panel surveys, anthropological studies, and independent measurement in the field.

PD May 1991. **TI** Risk and Insurance in Village India. **AA** Economics Research Center/NORC. **SR** Economics Research Center/NORC Discussion Paper: 91-3; Economics Research Center/NORC, 1155 E. 60th St., Chicago, Illinois 60637. **PG** 73. **PR** $2.00; send requests to Librarian, NORC. **JE** R13, O53, R11. **KW** India. Villages. Urban Economics. Regional Economics.

AB The Arrow-Debreu complete markets, full insurance model is taken to data from three poor high risk villages in the semi-arid tropics of southern India. The Standard A-D model is modified here to incorporate the salient features of the actual village economies, namely, changing numbers of members in households due to births, deaths, marriages, and divisions of extended families; changing demographic composition within families due to diverse age-sex consumption weights; a nontrivial variance covariance decomposition of income into its principle components -- crop, livestock, trade and handicraft, and labor income -- and of crop income into its principle components -- distinguishing crops and soil types -- showing that households are not doing the same thing and experiencing the same shocks; trade with the outside district economy; and potential nonseparabilities in consumption and leisure. Though the modified A-D model is rejected statistically, it does provide a surprisingly good benchmark.

Trueman, Brett

PD June 1986. **TI** A Theoretical Investigation into the Relative Accuracy of Management and Analyst Earnings Forecasts. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 15-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 29. **PR** $2.00; checks payable to U.C. Regents. **JE** M21, D21. **KW** Corporations. Profits. Income. Business Economics.

AB Over the past several years many researchers have empirically examined the issue of whether or not managerial earnings forecasts are more accurate than those prepared by security analysts. One result commonly found is that managerial forecasts which are released prior to analyst forecasts are at least as, if not more accurate than the posterior analyst forecasts. On the surface this seems paradoxical since analysts who release their forecasts after managerial forecast announcements are made have just as much, if not more, information with which to make a forecast than does the manager. The purpose of this paper is to provide one possible explanation for this paradox.

PD July 1986. **TI** An Explanation for Accounting Income Smoothing. **AU** Trueman, Brett; Titman, Sheridan. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Accounting Working Paper: 86-6; Anderson Graduate School of Management, University of California, Los Angeles, CA 90024-1481. **PG** 22. **PR** $2.00; checks payable to UC Regents. **JE** D21, M41, G32, L21. **KW** Accounting. Income. Business Finance.

AB It is widely believed that corporate managers often engage in accounting income smoothing. One reason given for this is that managers feel that a firm with a smoother income stream will receive a higher market valuation. While there have been many studies documenting the extent to which income smoothing takes place there have been few studies exploring why a manager might rationally want to smooth his firm's income and why the firm's stock price might rise as a result. It is shown here that an incentive to smooth income arises because such action causes the firm's claimholders to perceive a lower volatility for the firm's cash flows. As a result they will demand a lower rate of return from the firm. This also implies that a smoother income stream will be associated with a higher market value for the firm's shares.

TI An Explanation for Accounting Income Smoothing. **AU** Titman, Sheridan; Trueman, Brett.

PD July 1986. **TI** The Release of Proprietary Information as a Means of Reducing Competitive Costs. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Anderson Graduate School of Management Finance Working Paper: 16-86; Anderson Graduate School of Management, University of California, Los Angeles, Los Angeles, CA 90024-1481. **PG** 19. **PR** $2.00; checks payable to U.C. Regents. **JE** L13, D21, D82. **KW** Corporations. Private Information.
AB There have recently been studies which have shown that corporate managers may have incentives to release private information. A common thread through these studies is that the release of private information may also entail costs by providing competitors with valuable information. However, as is shown here, the release of private information may in many cases reduce, rather than enhance, competitive pressures, by lowering competitors' expected output and thereby increasing the expected price of industry output. The reduction in competition alone, then, may be an additional motivation for disclosing private information.

Tsomocos, D. P.

TI A Strategic Market Game with a Mutual Bank with Fractional Reserves and Redemption in Gold (A Continuum of Traders). **AU** Shubik, Martin; Tsomocos, D. P.

Udry, Christopher

PD April 1991. **TI** A Competitive Analysis of Rural Credit: State-Contingent Loans in Northern Nigeria. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 630; Economic Growth Center, Yale University, Box 1987 Yale Station, New Haven, CT 06520. **PG** 48. **PR** $2.00 + postage. **JE** Q12, Q14. **KW** Agriculture. Credit. Rural Economics.
AB In much recent theoretical literature, the problems of moral hazard and adverse selection are assumed to be decisive for the organization of agrarian institutions. In contrast, it is found that credit transactions in northern Nigeria take advantage of the free flow of information within rural communities. Information asymmetries are important, and their institutional consequences - the use of collateral and interlinked contracts - are absent. Credit transactions play a direct role in pooling risk between households through the use of contracts in which the repayment owed by the borrower depends on the realization of random production shocks by both the borrower and the lender. The paper presents a model which explores the general equilibrium consequences of contingent contracts in a dynamic setting.

urton, Diana M.

TI Policy Preference Functions: Grand Themes and New Directions. **AU** Love, H. Alan; Rausser, Gordon C.;Burton, Diana M.

van der Ploeg, Frederick

TI On Budgetary Policies and Economic Growth. **AU** Alogoskoufis, George S.; van der Ploeg, Frederick.

Van Order, Robert

TI Valuing the Implicit Guarantee of the Federal National Mortgage Association. **AU** Schwartz, Eduardo S.; Van Order, Robert.

van Wijnbergen, Sweder

PD May 1991. **TI** Intertemporal Speculation, Shortages and the Political Economy of Price Reform: A Case Against Gradualism. **AA** van Wijnbergen: The World Bank. **SR** CEPR Discussion Paper: 510; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 29. **PR** Pounds 3.00 or $5.00. **JE** 023, 311, 431. **KW** Price Reform. Liberalization. Intertemporal Speculation. Credibility.
AB How should countries like Poland or the USSR move towards price flexibility, gradually or in a 'big bang'? Why is it that governments committed to eventual price flexibility so often seem to be unable to let go of 'temporary' controls? How can one explain that after price increases early in a programme of price controls, one often sees output rise while at the same time shortages also seem to increase? This paper argues that intertemporal speculation, hoarding and the political economy of price reform go a long way towards explaining all these puzzles. We show that the interaction between shortages and political vulnerability of reformist governments to early perceptions of failure make for a strong argument against gradualism in the decontrol of prices.

Vanhaverbeke, Wim

TI Is Europe an Optimum Currency Area? Evidence from Regional Data. **AU** De Grauwe, Paul; Vanhaverbeke, Wim.

Vercammen, James

TI Trade Liberalization in the World Sugar Market: Playing on a Level Field? **AU** Schmitz, Andrew; Vercammen, James.

Vijay, Pradhan

TI The Potential Impact of the Mediterranean Fruit Fly, Ceratitis Capitata (Wied.), upon Establishment in California: An Update. **AU** Siebert, Jerome B.; Vijay, Pradhan.

Vincent, Daniel R.

TI Price Regulation and Quality of Service. **AU** Kamien, Morton I.; Vincent, Daniel R.

Vines, David

TI Simple Rules for the Open Economy: Evaluating Alternative Proposals. **AU** Tirelli, Patrizio; Vines, David.

Viscusi, W. Kip

TI Wealth Effects and the Value of Health. **AU** Evans, William N.; Viscusi, W. Kip.

Vogel, Steven J.

TI The Relevance of ALDI for Sub-Saharan Africa. **AU** Adelman, Irma; Vogel, Steven J.

Vohra, Rajiv

TI A Characterization of Egalitarian Equivalence. **AU** Dutta, Bhaskar; Vohra, Rajiv.

Voith, Richard

TI Accounting for Differences in Aggregate State Productivity. **AU** Carlino, Gerald A.; Voith, Richard.

TI Regional Impacts of Exchange Rate Movements. **AU** Carlino, Gerald A.; Cody, Brian J.; Voith, Richard.

PD November 1989. **TI** Consumer Choice with State-Dependent Uncertainty about Product Quality: Late Trains and Commuter Rail Ridership. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-7; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 37. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** L15, R41, D11. **KW** Product Quality. Consumption. Transportation System.
AB The quality of many goods and services frequently cannot be fully evaluated without purchasing the product. Even purchasing a product may not reveal its average quality if the product's quality is stochastic by nature. Through repeated purchases, consumers learn about the distribution of a product's quality and are better able to forecast the expected utility of another purchase. When choosing among alternatives, consumers may select products for which they have little information about the product's quality or purchase a substitute for which quality is known. When choosing the product of known quality, the consumer avoids risk, but learns nothing about the distribution of the other product's quality. In this paper, we are concerned with a related problem in which a consumer is choosing between two products, one of known quality and one with a state-dependent distribution of product quality.

TI Local Market and National Components in House Price Appreciation. **AU** Gyourko, Joseph; Voith, Richard.

TI Regional Authorities, Public Services, and the Location of Economic Activity. **AU** McAndrews, James J.; Voith, Richard.

PD October 1990. **TI** Transportation, Sorting, and House Values in the Philadelphia Metropolitan Area. **AA** Federal Reserve Bank of Philadelphia and University of Pennsylvania. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 90-22; Working Papers, Department of Research, Federal Reserve Bank of Philadelphia, 10 Independence Mall, Philadelphia, PA 19106. **PG** 41. **PR** no charge except overseas airmail, $2.00; checks/money orders in U.S. funds. **JE** R31, R41, R12, R21. **KW** Transportation System. Housing. Urban Economics. Commuters. Rail System.
AB In this paper, we examine residential sorting on the basis of employment location and transportation accessibility in the Philadelphia metropolitan area. Though employment in the Philadelphia region is fairly decentralized with multiple centers, the region provides a natural test for the sorting hypothesis since it has a commuter rail system that is specifically designed to bring suburban workers to the CBD. In particular, we attempt to explain the fraction of people in any suburban census tract that works in the CBD as a function of the tract's accessibility to the CBD and to other locations. In doing so, we can obtain evidence of the importance of accessibility to employment in the residential location choice as well as direct evidence on the effects of transportation system attributes on residential location and rents. We expect that locations with commuter rail service would have a greater fraction of CBD workers and own fewer cars per household. Locales with service should enjoy house value premiums if the commuter rail system is a an attractive alternative to the highway. Further, we expect the extent of sorting to increase with increases in transit service quality.

Vujovic, Dusan

TI Using SAM's to Account for Distortions in Non-Market Economies. **AU** Adelman, Irma; Berck, Peter; Vujovic, Dusan.

TI Designing Gradual Transition to Market Economies. **AU** Adelman, Irma; Berck, Peter; Vujovic, Dusan.

Wachtel, Paul

TI Were Price Changes during the Great Depression Anticipated? Evidence from Nominal Interest Rates. **AU** Evans, Martin; Wachtel, Paul.

Wadsworth, Jonathan

TI A Test of the Effect of Benefits on Search Activity in a Model of Endogenous Job Offer Arrivals. **AU** Schmitt, John; Wadsworth, Jonathan.

Wales, T. J.

TI Flexible Functional Forms and Tests of Homogeneous Separability. **AU** Diewert, W. E.; Wales, T. J.

Wales. T. J.

TI Multiproduct Cost Function Estimation and Subadditivity Tests: A Critique of the Evans and Heckman Research on the U.S. Bell System. **AU** Diewert, W. E.; Wales. T. J.

Wall, Richard A.

TI Decomposing Technical Change. **AU** Gort, Michael; Bahk, Byong H.; Wall, Richard A.

Wallace, Nancy E.

TI Testing the Translog Specification with the Fourier Cost Function. **AU** Chalfant, James A.; Wallace, Nancy E.

Walraven, Nicholas A.

TI Linkages among Commodity Futures Markets and Dynamic Welfare Analysis. **AU** Rausser, Gordon C.; Walraven, Nicholas A.

Walter, Ingo

TI Economic Restructuring in Europe and the Market for Corporate Control. **AU** Smith, Roy C.; Walter, Ingo.

TI Reconfiguration of Global Financial Markts in the 1990's. **AU** Smith, Roy C.; Walter, Ingo.

Weber, Axel A.

PD July 1991. **TI** Stochastic Process Switching and Intervention in Exchange Rate Target Zones: Empirical Evidence from the EMS. **AA** Weber: Universitat-Gesamthochschule Siegen. **SR** CEPR Discussion Paper: 554; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, United Kingdom. **PG** 48. **PR** Pounds 3.00 or $5.00. **JE** 431, 432. **KW** Intervention. Realignment. EMS. Exchange Rate Target Zones.
AB Exchange rate target zone models postulate that 'in the absence of intervention' exchange rates are driven by their fundamentals, which in this case are assumed to follow an unregulated Brownian motion process-the continuous time

equivalent of a random walk (with drift). Such random walk behaviour of freely floating exchange rates is a well-documented stylized fact. The possibility of policy intervention in foreign exchange markets, however, may lead to stochastic process switching: in a perfectly credible target zone the commitment of policy-makers to intervene at the boundaries of a band for the fundamentals gives rise to speculative bubbles, which stabilize the exchange rate within a narrower band. Inframarginal intervention may add to these stabilizing effects. On the other hand, in target zones which are imperfectly credible, policy intervention may also take the form of a realignment, a permanent jump in the central parity. The present paper employs a Bayesian approach to estimate the relative probabilities of these forms of stochastic process switching by using daily data on the Deutschmark exchange rate for the EMS currencies. The analysis reveals that for these EMS target zones intervention and realignment probabilities have recently declined drastically, and that the ERM is now close to being a fully credible peg.

Weber, Neville C.

TI Estimation of the Covariance Matrix of the Least Squares Regression Coefficients When the Disturbance Covariance Matrix is of Unknown Form. **AU** Keener, Robert W.; Kmenta, Jan; Weber, Neville C.

Weber, Robert

TI An Experimental Study of Voting Rules and Polls in Three-Way Elections. **AU** Forsythe, Robert; Myerson, Roger E.; Rietz, Thomas; Weber, Robert.

Weiner, Robert

TI Demand for Energy and Nonfuel Minerals: Final, Derived, and Speculative. **AU** Slade, Margaret E.; Kolstad, Charles; Weiner, Robert.

Wellisz, Stanislaw

TI The Ownership-Control Structure and the Behavior of Polish Enterprises during the 1990 Reforms: Macroeconomic Measures and Microeconomic Response. **AU** Frydman, Roman; Wellisz, Stanislaw.

Weymark, John A.

TI Social Choice with Analytic Preferences. **AU** Le Breton, Michel; Weymark, John A.

TI An Introduction to Arrovian Social Welfare Functions on Economic and Political Domains. **AU** Le Breton, Michel; Weymark, John A.

TI Generalized Median Social Welfare Functions. **AU** Bossert, Walter M.; Weymark, John A.

White, A. Patricia

PD April 1991. **TI** The GLOBEX Trading System. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 157; C/O Steven A. Sharpe, Mail Stop 89, Federal Reserve Board, Washington, DC 20551. **PG** 18. **PR** no charge. **JE** M21, G14. **KW** Electronic Trading. Trading Systems. Stock Market.

AB GLOBEX is an electronic order-entry and trade-matching system. Formed through a partnership of futures exchanges and an information services vendor, GLOBEX provides a mechanism for trading the existing contracts of futures exchanges outside of regular business hours. This article examines shifts in the credit, liquidity, and operational risks that arise in trading through GLOBEX. Most of these risks stem from the extended hours of trading rather than from the technology itself. Credit and liquidity risks largely will be managed through more prompt payment of margin at the clearing-house level. In addition, the technology of GLOBEX gives market participants new tools for controlling and evaluating risk at the level of a specific trader or terminal.

White, Lawrence J.

TI Catch a Wave: The Time Series Behavior of Mergers. **AU** Golbe, Devra L.; White, Lawrence J.

TI The Causes and Costs of Thrift Institution Failures: A Structure-Behavior-Outcomes Approach. **AU** Cole, Rebel A.; McKenzie, Joseph A.; White, Lawrence J.

Whittington, Leslie A.

PD August 1989. **TI** Fertility and the Personal Exemption: Implicit Pronatalist Policy in the United States. **AU** Whittington, Leslie A.; Aim, James; Peters, Elizabeth H. **AA** Whittington: University of Maryland. Aim and Peters: University of Colorado. **SR** Economics Research Center/NORC Population Research Center Discussion Paper: 89-6; Economics Research Center/NORC, 1155 E. 60th St., Chicago, Illinois 60637. **PG** 26. **PR** $2.00; send requests to Librarian, NORC. **JE** H24, J13, H21. **KW** Taxes. Income Tax. Tax System. Households. Fertility. Children. Birth Rate.

AB The personal exemption in the United States provides households with an income tax subsidy for each child. This paper uses aggregate time series data for the United States from 1913 to 1984 to estimate the impact of the tax value of the personal exemption on the aggregate birth rate. The empirical results indicate that the personal exemption has a positive and significant impact on fertility, and this result is robust to a variety of specifications. The United States therefore pursues an implicit pronatalist policy through the income tax, and the empirical results indicate that the recent Tax Reform Act of 1986 will, on average, increase this subsidy for fertility.

Wilde, Louis L.

TI The Use and Misuse of Surveys in Economic Analysis: Natural Resource Damage Assessment under CERCLA. **AU** Cicchetti, Charles J.; Dubin, Jeffrey A.; Wilde, Louis L.

Wilson, Charles A.

TI Auctions for Oil and Gas Leases with an Informed Bidder and a Random Reservation Price. **AU** Hendricks, Kenneth; Porter, Robert H.; Wilson, Charles A.

Wilson, Rob

TI Innovation and Export Volumes and Prices: A Disaggregated Study. **AU** Greenhalgh, Christine; Taylor, Paul.; Wilson, Rob.

Wolken, John D.

TI Banking Markets and the Use of Financial Services by Small and Medium-Sized Businesses. **AU** Elliehausen, Gregory E.; Wolken, John D.

Wooldridge, Jeffrey M.

PD March 1991. **TI** Multiplicative Panel Data Models without the Strict Exogeneity Assumption. **AA** Massachusetts Institute of Technology. **SR** Massachusetts Institute of Technology Department of Economics Working Paper: 574; Department of Economics, Massachusetts Institute of Technology, Cambridge, MA 02139. **PG** 23. **PR** $6.00 Domestic, $8.00 Overseas, $2.00 Student. **JE** C23, C13. **KW** Fixed Effects. Exogeneity. Panel Data. Method of Moments. Estimation.

AB This paper studies estimation of multiplicative, unobserved components panel data models without imposing the strict exogeneity assumption on the explanatory variables. The method of moments estimators proposed have significant robustness properties; they require only a conditional mean assumption, and apply to models with lagged dependent variables, finite distributed lag models that allow arbitrary feedback from the explained to the explanatory variables, and models with contemporaneous endogeneity. The model can be applied to any nonnegative explained variable, including count variables, binary variables, and continuously distributed nonnegative variables. An extension of the basic model applies to certain Euler equation applications with individual data.

Wyplosz, Charles

TI Price and Trade Effects of Exchange Rates Fluctuations and the Design of Policy Coordination. **AU** Cohen, Daniel; Wyplosz, Charles.

Yaron, Gil

PD September 1990. **TI** Trade Unions and Women's Relative Pay: A Theoretical and Empirical Analysis Using U.K. Data. **AA** NERA, London. **SR** Oxford Applied Economics Discussion Paper: 95; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL, ENGLAND. **PG** 38. **PR** not available. **JE** J51, J31. **KW** Unions. Wages. Wage Differentials.

AB The paper is concerned with the effect of trade unions on the absolute and relative pay of men and women in the labor market. The effect of unions is analyzed using a new model of unionization in which union status and any associated wage gains are simultaneously determined. Workers who have a union at their workplace gain a markup over those in non-unionized establishments. However, within establishments, workers on a certain grade receive a given wage whether union members or not. An additional markup may be obtained by joining a union in a unionized establishment if certain jobs are only held by union members. The union markup that accrues to married women in manual occupations is found to be significantly greater than that which accrues to manual married men.

Yermish, Scott

TI The Characteristics of Home Mortgage Debt, 1970-89: Trends and Implications. **AU** Goodman, Jack L., Jr.; Hudson, Yana; Yermish, Scott.

Zadrozny, Peter A.

PD June 1990. **TI** Estimating a Multivariate ARMA Model with Mixed-Frequency Data: An Application to Forecasting U.S. GNP at Monthly Intervals. **AA** Bureau of the Census. **SR** Bureau of the Census Center for Economic Studies Discussion Paper: 90-5; Center for Economic Studies, Bureau of the Census, Washington, DC 20233. **PG** 58. **PR** no charge. **JE** C22, C13, C51, C43. **KW** Aggregation. Autoregressive Process. Time Series. ARMA Model.

AB This paper develops and applies a method for directly estimating a multivariate, autoregressive moving average model with mixed frequency, time series date. Unlike standard, single frequency methods, the method does not require the date to be transformed to a single frequency or the model to be restricted by frequency. Subject to computational constraints, the method can handle any number of variables and frequencies. In addition, variables can be treated as temporally aggregated and observed with errors and delays. The key to the method is to view lower frequency data as periodically missing and to use the missing data variant of the Kalman filter. In the application, a bivariate, ARMA model is estimated with monthly observations on total employment and quarterly observations on real GNP, in the U.S., for January 1958 to December 1978.

Zambelli, Stefano

PD May 1991. **TI** The Wooden Horse that Wouldn't Rock: Reconsidering Frisch. **AA** University of California, Los Angeles and University of Aalborg, Denmark. **SR** University of California at Los Angeles Department of Economics Working Paper: 623; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 36. **PR** $2.50; checks payable to U.C. Regents. **JE** E13, E17, C62. **KW** Macroeconomic Model. Dynamic Model.

AB The present work reconsiders the celebrated article "Propagation Problems and Impulse Problems" by Ragnar Frisch [1933]. The main conclusion is that the propagating mechanism, contrary to what currently accepted, oscillates only under very peculiar or "non-economic" assumptions. Technically in Frisch's model the qualitative behavior of the economy described by the first order differential equation is equivalent - contrary to what Frisch himself thought - to the behavior described by the more cryptic and complicated mixed difference-differential equation. Moreover the examples presented by Frisch himself in the original model are misleading because, in order for the macrodynamic variables to exhibit some sort of oscillating behavior, it is necessary to postulate an unrealistic and inconsistent past historical evolution. These intrinsic contradictions are here studied and presented.

Zechner, Josef

TI Vendor Financing. **AU** Brennan, Michael J.; Maksimovic, Vojislay; Zechner, Josef.

Zhang, Yimin

TI Transportation Infrastructure Pricing in the Presence of Lumpy Investment. **AU** Oum, Tae Hoon; Zhang, Yimin.

Zhou, Lin

PD March 1991. **TI** Strictly Fair Allocations in Large Exchange Economies. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 972; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 26. **PR** $2.00. **JE** D51, D60, D58. **KW** Exchange Economy. Walrasian Equilibrium. Resource Allocation.

AB In this paper we introduce the concept of a strictly fair allocation and investigate the set of strictly fair allocations in large exchange economies. We prove that when agents' utility functions are differentiable, the set of strictly fair allocations coincides with the set of equal-income Walrasian equilibria. This is shown using both the "limit theorem" approach and the "limit economy" approach. We also extend the analysis to economies that have both atoms and an atomless sector. These results substantially improve upon the existing characterizations of equal-income Walrasian equilibria in terms of both economic efficiency and economic equity.

PD April 1991. **TI** A Refined Bargaining Set of an N-Person Game and Endogenous Coalition Formation. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 974; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 23. **PR** $2.00. **JE** C71. **KW** Cooperative Games. Game Theory. Bargaining Coalition.
AB The two most fundamental questions in cooperative game theory are: When a game is played, what coalitions will be formed and what payoff vectors will be chosen? No previous solution concepts or theories in the literature provide satisfactory answers to both questions; answers are especially lacking for the first one. In this paper we introduce the refined bargaining set, which is the first solution concept in cooperative game theory that simultaneously provides answers to both of the fundamental questions.

PD May 1991. **TI** An "Average" Lyapunov Convexity Theorem and Some Core Equivalence Results. **AA** Yale University. **SR** Yale Cowles Foundation Discussion Paper: 976; Yale University, Cowles Foundation, Box 2125, Yale Station, New Haven, CT 06520. **PG** 17. **PR** $2.00. **JE** D51, D58, C62. **KW** Convex. Core. Exchange Economy.
AB I prove an "average" version of the Lyapunov convexity theorem and apply it to establish some core equivalence results for an atomless economy.

Zilberman, David

TI Modeling Policy Reform in the U.S. Wheat and Feed Grain Sectors. **AU** Just, Richard E.; Rausser, Gordon C.; Zilberman, David.

TI Compensation and Political Feasibility: Facilitating Welfare Improving Policies. **AU** Just, Richard E.; Rausser, Gordon C.; Zilberman, David.

Zusman, Pinhas

PD April 1990. **TI** Organizational Equilibrium and the Optimality of Collective Action. **AU** Zusman, Pinhas; Rausser, Gordon C. **AA** Zusman: The Hebrew University. Rausser: University of California, Berkeley. **SR** University of California at Berkeley Department of Agricultural and Resource Economics (CUDARE) Working Paper: 528Rev; Department of Economics, 207 Giannini Hall, University of California, Berkeley, CA 94720. **PG** 27. **PR** $5.40. **JE** D71, D73. **KW** Collective Action.
AB Collective action tends to be socially suboptimal even when the proclivity of free riders to defect is fully controlled and organization for collective action is set up. To be effective, the organizational structure must feature a coordinating center and peripheral participants. Even if the overall group objective is fully internalized by the center, the organizational equilibrium is suboptimal as it reflects the influence of narrowly rational peripheral participants. The efficiency loss is particularly evident in collective action over time, where group choices are likely to be myopic-a propensity further exacerbated by the center's short planning horizon.