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)

Abel, Istvan

PD January 1992. **TI** Household Portfolios in Hungary, 1970-1990. **AU** Abel, Istvan; Szekely, Istvan P. **AA** Abel: Budapest University of Economics. Szekely: United Nations. **SR** Centre for Economic Policy Research Discussion Paper: 619; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 19. **PR** 3 pounds ($5.00). **JE** G11, O16, O52. **KW** Hungary. Economic Reform. Savings. Portfolio. Choice. Economic Development.

AB The paper deals with household saving and portfolio allocation in Hungary during the economic transformation. It describes the available assets, their structural characteristics, and the level of real and financial wealth accumulation during the last two decades. Special attention is paid to the impact of the reforms of the financial system and other important factors in economic transformation.

PD January 1992. **TI** Debt Service, Foreign Direct Investment and Transformation to Market: A Simple Model. **AU** Abel, Istvan; Bonin, John P. **AA** Abel: Budapest University of Economics. Bonin: Wesleyan University. **SR** Centre for Economic Policy Research Discussion Paper: 625; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 3 Pounds ($5.00). **JE** P52, F41, E63, O11, O21. **KW** Market Economy. Economic Policy. Economic Reform.

AB In this paper we focus on the macroeconomic framework for the transformation of the formerly socialist economies of Central Europe into capitalist mixed market economies. We construct a simple model to compare the situations in Hungary and Poland on the eve of the transformation before the new governments were elected. This model is used to evaluate the policies designed to lead the two countries along the road to a market economy. The magnitude of the debt service ratio fundamentally influences the chances for stability, while foreign direct investment has a profound influence on real appreciation of the domestic currency.

PD January 1992. **TI** The "Big Bang" Versus "Slow but Steady": A Comparison of the Hungarian and the Polish Transformations. **AU** Abel, Istvan; Bonin, John P. **AA** Abel: Budapest University of Economics. Bonin: Wesleyan University. **SR** Centre for Economic Policy Research Discussion Paper: 626; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 3 pounds ($5.00). **JE** P52, O52, E63, F31. **KW** Economic Reform. Europe. Exchange Rate. Stabilization Policy.

AB This paper discusses three aspects of stabilization and international integration: the real wage; inflation; and the real effective exchange rate. Using empirical evidence on inflation and the real effective exchange rate, we evaluate the gradualist option represented by the Hungarian reforms. The prospect for continuing a program based on a real exchange rate anchor supported by a crawling peg tied to a basket of convertible currencies is assessed. These issues are compared with the experience of Poland, which is considered to be an example of shock therapy using a nominal anchor.

Acharya, Sankarshan

PD December 1991. **TI** Value of Double Leverage, Bank Holding Companies and Capital Regulation. **AA** New York University and Federal Reserve Board. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 177; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 24. **PR** no charge. **JE** G32, G21, G34, G38. **KW** Banking. Leverage. Capital Structure.

AB A holding company (HC) can financially lever twice, first against assets of subsidiaries and then against assets of the parent company comprising the subsidiaries' equities. This paper shows that by double leverage, an HC could generate for its shareholders a value greater than the total value its subsidiaries could generate if they were independent firms. It pays shareholders of an independent bank, not currently owned by a bank holding company (BHC), to form a BHC to own the bank and lever twice. This result is consistent with bank holding company (BHC) data showing that BHCs exercise their option for double leverage, and that the number of BHCs in the U.S. increased rapidly from 25 in 1956 to 8945 in 1990. We further show that the leverage decision of a BHC is sensitive to regulatory bank capital requirements, and that a BHC is a better off maintaining only the minimum required capital in its subsidiary banks.

Admati, Anat R.

PD April 1989. **TI** Divide and Conquer: A Theory of Intraday and Day-of-the-Week Mean Effects. **AU** Admati, Anat R.; Pfleiderer, Paul. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1002; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 47. **PR** not available. **JE** G11, G12, G14. **KW** Stock Market. Portfolio Choice. Asset Pricing. Trading.

AB This paper develops a model in which patterns in buy and sell volume, order imbalances and expected price changes arise endogenously. The model covers cases where the market maker is competitive and where he is a monopolist. Our results provide an explanation for the existence of patterns in mean returns within the trading day and across trading days.

Agenor, Pierre-Richard

PD October 1991. **TI** Speculative Attacks and Models of Balance-of-Payments Crises. **AU** Agenor, Pierre-Richard; Bhandari, Jagdeep S.; Flood, Robert P. **AA** Agenor and Flood: International Monetary Fund. Bhandari: Duquesne University. **SR** International Monetary Fund Working Paper: WP/91/99; International Monetary Fund, Washington, DC 20431. **PG** 36. **PR** not available. **JE** F31, F41, E42. **KW** Exchange Rate. Monetary Policy. Exchange Intervention.
AB This paper reviews recent developments in the theoretical and empirical analysis of balance-of-payments crises. A simple analytical model highlighting the process leading to such crises is first developed. The basic framework is then extended to deal with a variety of issues, such as: alternative post-collapse regimes, uncertainty, real sector effects, external borrowing and capital controls, imperfect asset substitutability, sticky prices, and endogenous policy switches. Empirical evidence on the collapse of exchange rate regimes is also examined, and the major implications of the analysis for macroeconomic policy discussed.

PD November 1991. **TI** Speculative Attacks and Models of Balance-of-Payments Crises. **AU** Agenor, Pierre-Richard; Bhandari, Jagdeep S.; Flood, Robert P. **AA** Agenor and Flood: International Monetary Fund. Bhandari: Duquesne University. **SR** National Bureau of Economic Research Working Paper: 3919; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 49. **PR** $3.00. **JE** E52, E58, F33, F41. **KW** Monetary Policy. Exchange Rate. Central Bank.
AB This paper reviews recent developments in the theoretical and empirical analysis of balance-of-payments crises. A simple analytical model highlighting the process leading to such crises is first developed. The basic framework is then extended to deal with a variety of issues, such as: alternative post-collapse regimes, uncertainty, real sector effects, external borrowing and capital controls, imperfect asset substitutability, sticky prices, and endogenous policy switches. Empirical evidence on the collapse of exchange rate regimes is also examined, and the major implications of the analysis for macroeconomic policy are discussed.

Aghion, Philippe

PD September 1991. **TI** Growth and Unemployment. **AU** Aghion, Philippe; Howitt, Peter. **AA** Aghion: European Bank for Reconstruction and Development. Howitt: University of Western Ontario. **SR** Centre for Economic Policy Research Discussion Paper: 577; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 29. **PR** 3 pounds ($5.00). **JE** J64, O33, O41. **KW** Unemployment. Economic Growth. Technological Change. Innovations.
AB This paper examines the long-run effects of growth on unemployment. It assumes that growth arises explicitly from the introduction of new technologies, which require labor re-allocation for their implementation. Using a variant of the search theory developed by Pissarides, the paper shows how unemployment is affected by growth both directly, through the job-destruction rate, and indirectly through its effects on the incentive for firms to create job openings. Our results can be summarized as follows: first, the sign of the overall effect of growth on unemployment depends upon its source (more growth can result from an increase in either the size or the frequency of innovations, from human capital accumulation through learning-by-doing etc.); second, the size and sign of the overall effect of growth on unemployment depends upon the degree of complementarity in demand across consumption at different points in time and across sectors at a given point in time. Finally, endogenizing the growth process introduces new interactions between growth and unemployment.

PD October 1991. **TI** On the Virtue of Bad Times: An Analysis of the Interaction between Economic Fluctuations and Productivity Growth. **AU** Aghion, Philippe; Saint-Paul, Gilles. **AA** Aghion: European Bank for Reconstruction and Development. Saint-Paul: DELTA. **SR** Centre for Economic Policy Research Discussion Paper: 578; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 46. **PR** 3 pounds ($5.00). **JE** D24, E32, O47. **KW** Economic Growth. Economic Fluctuations. Recession. Business Cycle. Productivity.
AB This paper develops a simple model, which shows how economic fluctuations can stimulate growth. It is shown that firms tend to invest more in productivity growth during recessions, since the opportunity cost (in terms of foregone profits) of investing capital or labor resources in technological (or managerial) improvements is lower during recessions. It is then established that the average growth rate of the economy increases with the amplitude of the fluctuations and also with their frequency, provided that the initial average duration of recession phases is sufficiently low compared with that of the expansion phases. Finally, the main results of the paper are shown to be consistent with the empirical evidence recently produced by Davis-Haltiwanger (1990) or Blanchard-Diamond (1990) concerning the cyclical behavior of job re-allocation.

Aiyagari, S. Rao

PD October 1991. **TI** Optimal Capital Income Taxation and Long Run Debt with Borrowing Constraints. **AU** Aiyagari, S. Rao; Peled, Dan. **AA** Aiyagari: Federal Reserve Bank of Minneapolis. Peled: University of Western Ontario and Israel Institute of Technology. **SR** University of Western Ontario Department of Economics Research Report: 9113; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 24. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** H21, H24, D91. **KW** Taxes. Income Tax. Bequests.
AB For a wide class of dynamic models, Chamley (1986) has shown that the optimal capital income tax rate is zero in the long-run. Lucas (1990) has argued that for the U.S. economy there is a significant welfare gain from switching to this policy. We argue that the presence of binding borrowing constraints always leads to a positive optimal tax rate on capital income even in the long-run. In addition, such models are capable of determining the optimal long-run level of government debt independently of its initial level. For an important class of models pioneered by Bewley (1980), borrowing constraints will always bind on some of the people in each period. Our analysis is also applicable to overlapping generations models without bequest motives, or those with bequest motives but binding bequest constraints. An important problem for the future is to determine if a realistically parameterized Bewley type model with binding borrowing constraints can support the observed level of the capital income tax rate as optimal in the long-run.

Aizenman, Joshua

PD July 1991. **TI** Foreign Direct Investment, Productive Capacity and Exchange Rate Regimes. **AA** Dartmouth

College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3767; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F43, F41, F31, F21. **KW** Exchange Rate. Foreign Investment. International Trade.
AB The purpose of this paper is to examine the implications of foreign direct investment and endogenous capacity choice on the welfare ranking of exchange rate regimes, and to analyze the linkages between volatility of shocks, the volume of trade, and investment. We construct an intertemporal version of a monopolistic competitive framework, where producers may diversify internationally by foreign direct investment. Volatility is shown to induce both higher international trade in goods, as well as higher foreign direct investment, with the possibility of increasing the productive capacity in diversified industries. We apply the above framework to the welfare ranking of exchange rate regimes in the presence of nominal contracts.

PD January 1992. **TI** Exchange Rate Flexibility, Volatility, and the Patterns of Domestic and Foreign Direct Investment. **AA** Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3953; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** $3.00. **JE** F23, F21, F31, E22, E42. **KW** Exchange Rate. Investment. Foreign Investment.
AB The goal of this paper is to investigate the factors determining the impact of exchange rate regimes on the behavior of domestic investment and foreign direct investment (FDI), and the correlation between exchange rate volatility and investment. We assume that producers may diversify internationally in order to reallocate employment and production towards the more efficient or the cheaper plant. We characterize the possible equilibria in a macro model that allows for the presence of a short-run Phillips curve, under a fixed and a flexible exchange rate regime. It is shown that a fixed exchange rate regime is more conducive to FDI relative to a flexible exchange rate, and this conclusion applies for both real and nominal shocks. The correlation between investment and exchange rate volatility under a flexible exchange rate is shown to depend on the nature of the shocks. If the dominant shocks are nominal, we will observe a negative correlation, whereas if the dominant shocks are real, we will observe a positive correlation between exchange rate volatility and the level of investment.

Alesina, Alberto

PD January 1992. **TI** Menus of Linear Income Tax Schedules. **AU** Alesina, Alberto; Weil, Philippe. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3968; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** H21, H24, H31, E62. **KW** Income Taxes. Taxation. Fiscal Policy. Consumer Theory. Taxes.
AB Relative to traditional piecewise linear income taxation schemes, it is possible to increase government revenues by offering to consumers a menu of linear income tax schedules. In the resulting Pareto-superior equilibrium, consumers sort themselves out according to their (unobservable) productivity level, with high productivity agents choosing the tax schedules with low marginal tax rate and high intercept. This scheme extracts from the economy any unexploited sources of revenue which, in contrast with standard supply-side proposals, does not depend on the economy being on the downward-sloping side of the Laffer curve.

PD January 1992. **TI** Macroeconomic Policy and Elections in OECD Democracies. **AU** Alesina, Alberto; Cohen, Gerald D.; Roubini, Nouriel. **AA** Alesina and Cohen: Harvard University. Roubini: Stanford University. **SR** Centre for Economic Policy Research Discussion Paper: 608; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 29. **PR** $3.00 (5 Pounds). **JE** D72, D78, E42, E63. **KW** Monetary Policy. Fiscal Policy. Elections. Political Economy.
AB The purpose of this paper is to test for evidence of opportunistic "political business cycles" in a large sample of 18 OECD economies. Our results can be summarized as follows. First, we find very little evidence of pre-electoral effects of economic outcomes, in particular, on GDP growth and unemployment. Second, we see some evidence of "political monetary cycles," that is, expansionary monetary policy in election years. Third, we observe indications of "political budget cycles," or "loose" fiscal policy prior to elections. Fourth, inflation exhibits a post-electoral jump, which could be explained by either the pre-electoral "loose" monetary and fiscal policies and/or by an opportunistic timing of increases in publicly controlled prices, or indirect taxes.

PD January 1992. **TI** Menus of Linear Income Tax Schedules. **AU** Alesina, Alberto; Weil, Philippe. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3968; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 18. **PR** $3.00. **JE** H24, H21, D11. **KW** Income Taxes. Taxation. Government Revenue.
AB Relative to traditional piecewise linear income taxation schemes, it is possible to increase government revenues by offering to consumers a menu of linear income tax schedules. In the resulting Pareto-superior equilibrium, consumers sort themselves out according to their (unobservable) productivity level, with high productivity agents choosing the tax schedules with a low marginal tax rate and a high intercept. This scheme extracts from the economy an unexploited source of revenue which, in contrast with standard supply-side proposals, does not depend on the economy being on the downward-sloping side of the Laffer curve.

Almeida dos Reis, Jose Guilherme

PD February 1990. **TI** Wage Inequality and the Distribution of Education: A Study of the Evolution of Regional Differences in Inequality in Metropolitan Brazil. **AU** Almeida dos Reis, Jose Guilherme; Barros, Ricardo. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 606; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 43. **PR** $2.00 + postage. **JE** O54, O15, O12. **KW** Brazil. Education. Income Distribution.
AB The paper analyzes the evolution of education and wage inequality in metropolitan Brazil from 1976 to 1986. The study is based on data from ten Brazilian Annual Household Surveys (PNADs) for the period 1976-1986. The universe of analysis

was limited to prime-age males. The inequality used was Theil's second measure which is analytically convenient to study the determinants of inequality. It is shown that education can explain almost 50% of the wage inequality in metropolitan Brazil. Large differences in wage inequality are observed across metropolitan regions, the inequality being higher in poor Northeast metropolitan regions. To identify whether the large regional differences in inequality were directly associated to differences in educational levels or to differences in the steepness of the wage-education profiles some simulations were conducted. The simulation results indicate that wage inequality is much smaller in the South-Southeast metropolitan regions than in the Northeast metropolitan regions not because the South and Southeast regions have higher or better distributed levels of education, but because (perhaps as a consequence of a better distribution of education) the wage-education profile is less steep in these regions than in the Northeast regions.

Altig, David

PD November 1991. **TI** Borrowing Constraints and Two-Sided Altruism with an Application to Social Security. **AU** Altig, David; Davis, Steve J. **AA** Altig: Federal Reserve Bank of Cleveland. Davis: University of Chicago, Federal Reserve Bank of Chicago, and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3913; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** $3.00. **JE** E21, E62, D91, E13. **KW** Fiscal Policy. Overlapping Generations. Intergenerational Transfers. Social Security. Liquidity Constraints.

AB We develop the implications of borrowing constraints and two-sided altruism in an overlapping generations framework with agents who live three periods. Our analysis identifies six equilibrium patterns of intertemporal and intergenerational linkages in the non-loan economy, one of which corresponds to Barro's dynastic model. Novel linkage patterns involve parent-to-child transfers early in the life cycle, child-to-parent gifts late in the life cycle, or both. Capital accumulation behavior and the consequences of fiscal policy interventions depend, often critically, on which linkage patterns prevails. We show how unfunded social security interventions can significantly depress aggregate capital accumulation, even when every generation is linked to its successor generation by altruistic transfers. We also derive a non-Ricardian neutrality result for gift-motive economies that holds whether or not borrowing constraints bind and whether or not parent and child are connected by an operative altruism motive at all points in the life cycle.

Altman, Edward I.

PD 1992. **TI** The Implications of Corporate Bond Rating Drift. **AU** Altman, Edward I.; Kao, Duen Li. **AA** Altman: New York University. Kao: General Motors Investment Management Corporation. **SR** New York University Salomon Brothers Center Working Paper: S-91-51; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 27. **PR** $5.00. **JE** G14, G10. **KW** Corporate Bonds. Bonds.

AB The purpose of this research is to report on an in-depth investigation of rating changes (drift) over time. Using Standard and Poor's bond rating history, we attempt to answer a number of related questions: What was the rating change experience of corporate bonds from the time of issuance to various subsequent periods after issuance? Was there a greater tendency for bonds of various initial ratings to be upgraded after issuance? Was there a greater tendency for bonds of various initial ratings to be upgraded or downgraded over a ten year post-issuance period? Did the rating change probabilities vary by time period of issuance? And, after a rating change is observed, what can we expect about subsequent changes in credit quality of that issue? We find definite serial auto-correlation of downgrades indicating that one can expect a second downgrade after an initial one in significantly greater frequency than a second change upgrade.

Altshuler, Rosanne

PD December 1991. **TI** The Effects of U.S. Tax Policy on the Income Repatriation Patterns of U.S. Multinational Corporations. **AU** Altshuler, Rosanne; Newlon, T. Scott. **AA** Altshuler: Columbia University and National Bureau of Economic Research. Newlon: U.S. Department of the Treasury. **SR** National Bureau of Economic Research Working Paper: 3925; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** H25, F23, H26. **KW** Corporate Taxation. Tax System. Multinationals. Tax Evasion.

AB U.S. corporations owe taxes to the U.S. Treasury on income earned both inside and outside American borders. This paper examines the incentives created by the U.S. tax system for the legal avoidance of taxes on foreign source income. Using data from 1986 corporate tax returns, we investigate the extent to which U.S. corporations structure and coordinate remittances of income from their foreign subsidiaries to reduce their U.S. and foreign tax liabilities. In contrast to previous work in this area, our estimates of the tax consequences of income remittances from foreign subsidiaries to parent corporations explicitly take into account the ability to use foreign tax credits generated from one source of foreign income to offset the U.S. tax liability generated by other sources of foreign income, withholding tax rates on income remittances, variations in source country corporate income tax systems, and dynamic aspects of the U.S. tax system. Our findings indicate that U.S. multinationals are able to take advantage of the U.S. tax system to avoid paying much U.S. tax on their foreign source income.

Andersen, Torben M.

PD December 1991. **TI** Nominal Inertia in a Dynamic Model of Product and Labor Market Interactions. **AU** Andersen, Torben M.; Christensen, Michael. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-32; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 19. **PR** no charge. **JE** E31, E24, E32. **KW** Price Level. Prices. Inflation. Wages. Business Cycle.

AB Nominal shocks are shown to have real effects through real wage changes induced by asymmetric adjustment of nominal wages and prices. The model assumes instantaneous market clearing in both product and labor markets as well as symmetric information in the two markets. The key to nominal inertia is the non-trivial interdependence between wages and prices in a dynamic model which is activated by agents being unable to distinguish between permanent and transitory nominal changes. The implications of this inertia for business cycle movements are analyzed.

PD December 1991. **TI** Price and Wage Interactions in an Open Economy. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-33; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 27. **PR** no charge. **JE** E24, E31, F41. **KW** Wages. Price Level. Open Economy. Exchange Rate.
AB The paper analyzes the interaction between price and wage formation in an open economy and in particular how changes in foreign prices are transmitted into domestic wages and prices. The first part of the paper sets out a model of imperfect competition and outlines the interdependencies in wage and price formation. The second part shows how informational problems may cause nominal rigidity in wages and prices and variations in the terms of trade. It is shown that although prices and wages are based on symmetric information, they need not adjust symmetrically implying that changes in foreign prices may affect real wages. Finally, it is shown how temporary changes can have persistent effects.

Andersson, Krister

PD October 1991. **TI** Taxation of Capital Gains - A Review of the Main Issues. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/103; International Monetary Fund, Washington, DC 20431. **PG** 15. **PR** not available. **JE** H21, H24, E62. **KW** Taxes. Inflation. Tax Policy. Capital Gains.
AB This paper reviews the main issues that need to be addressed in the taxation of capital gains. The main focus of the paper is on the tax treatment of capital gains in the United States. The impact of inflation on asset values and the taxation of gains have led to calls for an inflation-adjusted taxation of capital gains. Others have called for the exclusion of a part of the nominal gains from taxation. This paper argues that if the exclusion method is used, the exclusion rate should increase as the holding period gets longer.

Angeloni, Ignazio

PD November 1991. **TI** Cross-Border Deposits and Monetary Aggregates in the Transition to EMU. **AU** Angeloni, Ignazio; Cottarelli, Carlo; Levy, Aviram. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/114; International Monetary Fund, Washington, DC 20431. **PG** 36. **PR** not available. **JE** F36, E41, E52. **KW** International Finance. Monetary Policy. Forecasting. Europe. Money Demand.
AB This paper discusses the effect of cross-border deposits (CBDs) for the stability of the relation between monetary aggregates and nominal GDP in the five largest EC countries. The analysis is developed in terms of "information content" of alternative money definitions (including or excluding selected subsets of CBDs), derived from a multicountry simultaneous system of money demand equations. We show that in the most recent period traditional money aggregates have lost information value and that they are dominated by alternative money definitions that include CBDs, such as those based on the residency of the holder or on the currency of denomination.

Angrist, Joshua D.

PD November 1991. **TI** Instrumental Variables Estimation of Average Treatment Effects in Econometrics and Epidemiology. **AA** Hebrew University of Jerusalem. **SR** National Bureau of Economic Research Technical Paper: 115; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $3.00. **JE** C25, C35, C43. **KW** Index Models. Maximum Likelihood. Instrumental Variables. Probit Model.
AB The average effect of intervention or treatment is a parameter of interest in both epidemiology and econometrics. A key difference between applications in the two fields is that epidemiologic research is more likely to involve qualitative outcomes and nonlinear models. An example is the recent use of the Vietnam era draft lottery to construct estimates of the effect of Vietnam era military service on civilian mortality. In this paper, I present necessary and sufficient conditions for linear instrumental variables techniques to consistently estimate average treatment effects in qualitative or other nonlinear models. Most latent index models commonly applied to qualitative outcomes in econometrics fail to satisfy these conditions, and Monte Carlo evidence on the bias of instrumental estimates of the average treatment effect in a bivariate probit model is presented. The evidence suggests that linear instrumental variables estimators perform nearly as well as the correctly specified maximum likelihood estimator, especially in large samples. Linear instrumental variables and the normal maximum likelihood estimator are also remarkably robust to non-normality.

PD December 1991. **TI** Sources of Identifying Information in Evaluation Models. **AU** Angrist, Joshua D.; Imbens, Guido W. **AA** Angrist: Hebrew University. Imbens: Harvard University. **SR** National Bureau of Economic Research Technical Paper: 117; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $3.00. **JE** H53, H43, C93, I38. **KW** Experimental Design. Program Evaluation. Treatment Effects. Social Programs. Identification.
AB The average effect of social programs on outcomes such as earnings is a parameter of primary interest in econometric evaluations studies. New results on using exclusion restrictions to identify and estimate average treatment effects are presented. Identification is achieved given a minimum of parametric assumptions, initially without reference to a latent index framework. Most econometric analyses of evaluation models motivate identifying assumptions using models of individual behavior. Our technical conditions do not fit easily into a conventional discrete choice framework, rather they fit into a framework where the source of identifying information is institutional knowledge regarding program administration. This framework also suggests an attractive experimental design for research using human subjects, in which eligible participants need not be denied treatment. We present a simple instrumental variables estimator for the average effect of treatment on program participants, and show that the estimator attains Chamberlain's semi-parametric efficiency bound. The bias of estimators that satisfy only exclusion restrictions is also considered.

PD December 1991. **TI** Identification and Estimation of Local Average Treatment Effects. **AU** Angrist, Joshua D.; Imbens, Guido W. **AA** Angrist: Hebrew University. Imbens: Harvard University. **SR** National Bureau of Economic Research Technical Paper: 118; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $3.00. **JE** C25, C51, I38.

KW Instrumental Variables. Treatment Effects. Identification.
AB We investigate conditions sufficient for identification of average treatment effects using instrumental variables. First we show that the existence of valid instruments is not sufficient to identify any meaningful average treatment effect. We then establish that the combination of an instrument and a condition on the relation between the instrument and the participation status is sufficient for identification of a local average treatment effect for those who can be induced to change their participation status by changing the value of the instrument. Finally, we derive the probability limit of the standard IV estimator under these conditions. It is seen to be a weighted average of local average treatment effects.

Anonymous

PD November 1991. **TI** Review of the Year's Work, 1990-91. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 56; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 68. **PR** no charge. **JE** J20, J30, J50, E20, O50. **KW** Human Resources. Industrial Relations. Corporations. Economic Performance.
AB The second annual report from the Centre for Economic Performance, providing a detailed review of the work carried out over the last year.

Artis, Michael J.

PD December 1991. **TI** Is There an "EMS" Effect in European Labour Markets? **AU** Artis, Michael J.; Ormerod, Paul. **AA** Artis: University of Manchester. Ormerod: Henley Centre for Forecasting. **SR** Centre for Economic Policy Research Discussion Paper: 598; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 16. **PR** 3 Pounds ($5.00). **JE** F31, E31, E24, J31. **KW** Exchange Rate. Inflation. Wages. Unemployment.
AB It is claimed that membership of the exchange rate mechanism (ERM) of the European Monetary System (EMS) gives countries a credibility bonus which reduces the output and employment costs of disinflation. Within the EMS this arises because of the commitment of participants in the ERM to maintain their parities against the Deutschmark, with Germany acting as a low-inflation anchor. The paper finds evidence of such a credibility effect: during "the EMS period" (flexibly dated) German inflation enters into autoregressive inflation predictor schemes for each of the main EMS countries (Belgium, France, Germany, Italy, and the Netherlands). In addition, the process of wage determination in these countries appear to have been affected by institutional changes associated with adjustment to the ERM. Nevertheless, there is also a large residual (upward) adjustment of unemployment.

PD January 1992. **TI** Monetary Policy in Stage Two of EMU. What can We Learn from the 1980's? **AA** University of Manchester. **SR** Centre for Economic Policy Research Discussion Paper: 629; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 38. **PR** 3 pounds ($5.00). **JE** E42, E43, E41, E52. **KW** Monetary Union. Europe. Monetary Policy. Money Demand.
AB A smooth progression from Stage Two to Stage Three of EMU requires that they type of policy planned for Stage Three should be foreshadowed in Stage Two. Two possibilities for that policy are monetary targeting or an interest rate policy feeding back on a nominal variable. The paper re-examines the evidence of the 1980's to determine the nature and stability of reduced form relationships involving money and interest rates. Geweke linear feedback measures are presented for a subset of the G7 countries (France, Germany, Italy, the United Kingdom and the United States). Greater stability is found in relationships involving money than expected, while interest rate leads, though significant, are often at long lags. In addition, aggregate ERM money demand functions are shown to be stable. These results, though not conclusive, provide support for the case for monetary targeting.

Asquith, Paul

PD December 1991. **TI** Anatomy of Financial Distress: An Examination of Junk-Bond Issuers. **AU** Asquith, Paul; Gertner, Robert; Scharfstein, David. **AA** Asquith and Scharfstein: Massachusetts Institute of Technology. Gertner: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 3942; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $3.00. **JE** G33, G32. **KW** Stock Market. Junk Bonds. Corporate Finance. Bankruptcy.
AB This paper examines the events following the onset of financial distress for 102 public junk bond issuers. We find that out-of-court debt relief mainly comes from junk bond holders; banks almost never forgive principal, though they do defer payments and waive debt covenants. Asset sales are an important means of avoiding Chapter 11 reorganization; however, they may be limited by industry factors. If a company simply restructures its bank debt, but either does not restructure its public debt or does not sell major assets or merge, the company goes bankrupt. The structure of a company's liabilities affects the likelihood that it goes bankrupt; companies whose bank and private debt are secured as well as companies with complex public debt structures are more prone to go bankrupt. Finally, there is no evidence that more profitable distressed companies are more successful in dealing with financial distress; they are not less likely to go bankrupt, sell assets, or reduce capital expenditures.

Atack, Jeremy

PD December 1991. **TI** Whom did Protective Legislation Protect? Evidence from 1880. **AU** Atack, Jeremy; Bateman, Fred. **AA** Atack: University of Illinois and National Bureau of Economic Research. Bateman: University of Georgia and Indiana University. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors and Long-Run Growth: 33; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** N31, J58. **KW** Labor Demand. Employment. Gender. Labor Laws.
AB Laws limiting the hours of work for women and children first emerged in the middle of the nineteenth century in the vanguard of progressive era legislation. Today the dominant interpretation of such legislative regulations is that they reflect successful rent-seeking by some group. Specifically, men sought such laws to restrict job opportunities for women. These laws may have had this effect in the late twentieth century. However, we believe that they emerged in the nineteenth century in response to demands by both men and women for the shorter hours that they had been unable to secure through

individual or collective bargaining. As contemporaries put it, men fought the battle for shorter hours "from behind the petticoats of women." The passage of these laws brought shorter hours to both men and women and do not seem to have displaced women from the workplace at the time. The differential impact of these hours laws between late nineteenth and the late twentieth centuries reflects society's success in eliminating other forms of sex discrimination. In the nineteenth century, thanks to rigid gender-based occupational segregation, men and women were complementary factors of production. With the breakdown of such rules, they became substitutes and men came to reap some rents from hours regulations but these were not anticipated when the legislation was adopted.

Attanasio, Orazio P.

PD September 1990. **TI** Consumption, Productivity Growth and the Interest Rate. **AU** Attanasio, Orazio P.; Weber, Guglielmo. **AA** Attanasio: Stanford University and Centre for Economic Policy Research. Weber: University College London and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/12; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 32. **PR** 3 pounds. **JE** D12, E21, D91. **KW** Intertemporal Substitution. Consumption. Aggregation Bias. Consumer Economics.

AB In this paper we present empirical evidence on the importance of aggregation bias in Euler equations for consumption. The main result is that estimates of the elasticity of intertemporal substitution for consumption are consistently lower for aggregate data than for average cohort data. In trying to explain these differences we find that a major role is played by the nonlinearity of the estimating equation and by omitted demographic factors (normally unobservable in aggregate data). However, even when these sources of aggregation bias are corrected for, the estimates of the elasticity of intertemporal substitution obtained from aggregate data remain lower than those obtained from average cohort data. Furthermore, aggregate consumption growth depends on expected productivity and income growth. This suggests that entries and exits from the consumption pool, or more generally finite horizons and incomplete markets, might explain some of the difference. In the second half of this paper we investigate theoretical explanations of our empirical results.

Auerbach, Alan J.

PD July 1991. **TI** Life Insurance Inadequacy-Evidence from a Sample of Older Widows. **AU** Auerbach, Alan J.; Kotlikoff, Laurence J. **AA** Auerbach: University of Pennsylvania and National Bureau of Economic Research. Kotlikoff: Boston University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3765; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J14, H55, J11, J18. **KW** Widows. Elderly. Life Insurance. Social Security.

AB This paper studies the changes in income experienced by older women when their husbands die. The data used are the Retirement History Survey. The six waves of this survey provide information on roughly 1300 women who became widowed during the survey period, 1960-1979. The findings indicate that about one third of new widows experience a substantial reduction (25 percent or greater) in their living standards when their husbands die. The reduction in living standard associated with the husband's death is more severe for younger widows and widows with greater income pre-widowhood. Couples could insure against severe reductions in income of widows by purchasing more life insurance. These findings lead, therefore, to the conclusion reached in previous studies by the authors and other researchers, namely that many couples fail to purchase enough life insurance to prevent a sharp drop in the wife's consumption if her husband dies.

PD November 1991. **TI** Taxation and Foreign Direct Investment in the United States: A Reconsideration of the Evidence. **AU** Auerbach, Alan J.; Hassett, Kevin. **AA** Auerbach: University of Pennsylvania and National Bureau of Economic Research. Hassett: Columbia University. **SR** National Bureau of Economic Research Working Paper: 3895; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** $3.00. **JE** F21, E62, G31, G34. **KW** Foreign Investment. Tax System. Mergers. Capital Mobility.

AB Foreign direct investment in the United States boomed in the late 1980's. Some have attributed this rise to the Tax Reform Act of 1986, which by discouraging investment by domestic firms may have provided opportunities for foreign firms not as strongly affected by the U.S. tax changes. We challenge this view on theoretical and empirical grounds, finding that: (1) While the argument applies to new capital investment, the boom was primarily in mergers and acquisitions; (2) While the argument holds primarily for investment in equipment, there was no shift toward the acquisition of equipment - intensive firms, and (3) The FDI boom in the U.S. was really part of a worldwide FDI boom - the U.S. share of outbound FDI from other countries did not increase during the period 1987-9.

PD November 1991. **TI** Social Security and Medicare Policy from the Perspective of Generational Accounting. **AU** Auerbach, Alan J.; Gokhale, Jagadeesh; Kotlikoff, Laurence J. **AA** Auerbach: University of Pennsylvania and National Bureau of Economic Research. Gokhale: Federal Reserve Board of Cleveland. Kotlikoff: Boston University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3915; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** H22, H51, H55, H31, D91. **KW** Fiscal Policy. Tax Incidence. Intergenerational Model. Social Security.

AB Our previous study (Auerbach, Gokhale and Kotlikoff 1991) introduced the concept of "generational accounting," a method of determining how the burden of fiscal policy falls on different generations. It found that fiscal policy in the U.S. is out of balance, in terms of projected generational burdens. This means that either current generations will bear a larger share (than we project under current law) of the burden of the government's spending or that future generations will have to pay, on average, at least 21 percent more, on a growth-adjusted basis, than will those generations who have just been born. These conclusions were based on relatively optimistic assumptions about the path of social security and Medicare policies, namely that the accumulation of a social security trust fund would continue and that Medicare costs would would not rise as a share of GNP. In this paper, we simulate the effects of realistic alternative paths for social security and Medicare. Our results suggest that such alternative policies could greatly increase the imbalance in generational policy, making not only future generations pay significantly more, but current young

https://doi.org/10.1017/S0951007900002576 Published online by Cambridge University Press

Americans as well. For example, continued expansion of Medicare in this decade alone could double the 21 percent imbalance figure if the bill for this Medicare growth is shifted primarily to future generations.

PD January 1992. **TI** On the Design and Reform of Capital Gains Taxation. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3967; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** H21, H31, G11, D11. **KW** Tax Policy. Capital Gains. Savings. Taxation. Household. Consumer Theory.

AB After reviewing recent work on the feasibility of taxing capital gains on accrual or in an equivalent manner, this paper develops and presents simulations of a model of household behavior, aimed at assessing the efficiency effects of this and other tax reforms. The model accounts for the portfolio choice and intertemporal consumption distortions that capital gains taxes induce under current law. Among the simulation results are: 1) Eliminating the "lock-in" effect through a revenue-neutral move to accrual taxation causes national saving to decline, as households face a lower tax on present consumption from appreciated assets and, by reallocating existing wealth more efficiently, need to save less for future contingencies. Despite reducing saving, however, such a reform increases economic efficiency. 2. A simple reduction in the rate of capital gains taxation reduces national saving even for very high intertemporal elasticities of substitution because of the additional income effect associated with reduced taxes on previously accumulated gains and the more efficient reallocation of existing wealth. However, making the tax cut prospective, although increasing savings, delays portfolio rebalancing and need not improve efficiency.

PD January 1992. **TI** On the Design and Reform of Capital Gains Taxation. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3967; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 11. **PR** $3.00. **JE** H21, G11, D91, E21. **KW** Tax Reform. Taxation. Portfolio Choice. Consumption. Savings.

AB After reviewing recent work on the feasibility of taxing capital gains on accrual or in an equivalent manner, this paper develops and presents simulations of a model of household behavior, aimed at assessing the efficiency effects of this and other tax reforms. The model accounts for the portfolio choice and intertemporal consumption distortions that capital gains taxes induce under current law. Among the simulation results are: 1. Eliminating the "lock-in" effect through a revenue-neutral move to accrual taxation causes national saving to decline, as households face a lower tax on present consumption from appreciated assets and, by reallocating existing wealth more efficiently, need to save less for future contingencies. Despite reducing saving, however, such a reform increases economic efficiency. 2. A simple reduction in the rate of capital gains taxation reduces national saving even for very high intertemporal elasticities of substitution, because of the additional income effect associated with reduced taxes on previously accumulated gains and the more efficient reallocation of existing wealth. However, making the tax cut prospective, although increasing saving, delays portfolio rebalancing and need not improve efficiency.

Ayuso, Juan

PD February 1992. **TI** Efficiency in the Peseta Forward Exchange Rate Market. **AU** Ayuso, Juan; Dolado, Juan J.; Sosvilla-Rivero, Simon. **AA** Ayuso and Dolado: Banco de Espana. Sosvilla-Rivero: Ministry of Economy, Madrid. **SR** Centre for Economic Policy Research Discussion Paper: 627; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 45. **PR** 3.00 pounds or $5.00. **JE** G15, F31. **KW** Efficient Markets. Exchange Rate. Risk Premiums.

AB This paper applies recent cointegration techniques to analyze whether the forward market for the peseta/U.S. dollar is efficient in both the one-month and the three-month segments of the market. Under the assumption of rationality, the premiums are small and they suggest a possible linear relationship between the premium and the expiration date of the contract. As a by-product of the analysis, an explanation is offered for the conflicting results which have been obtained in testing forward market efficiency, when such efficiency is tested with series in levels or with the deviations thereof in relation to the current spot rates.

Azam, Qazi Tauqir

PD May 1991. **TI** Agricultural Research Productivity in Pakistan. **AU** Azam, Qazi Tauqir; Bloom, Erik A.; Evenson, Robert E. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 644; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 119. **PR** $2.00 + postage. **JE** O47, Q11, Q16. **KW** Productivity Growth. Economic Growth. Agriculture. Agriculture Technology.

AB Productivity growth is an important component of economic growth in agriculture. Agricultural research programs have been shown in a number of studies to have contributed to productivity growth (see Evenson and Pray 1990 for a summary). This study is one of the first to quantify the economic impacts of agricultural research in Pakistan.

Bagwell, Kyle

PD August 1991. **TI** Competitive Limit Pricing under Imperfect Information. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 954; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 30. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** L13, D43. **KW** Entry. Incumbents. Market Strategy. Limit Pricing.

AB This paper offers a new theory of limit pricing. Incumbents from different markets or regions "compete" against one another, with each attempting to price in a manner that deflects entry into the others' markets. An entrant is imperfectly informed as to the incumbents' respective investments in cost reduction and seeks to enter markets in which incumbents have high costs. In the focal equilibrium, the entrant uses a simple "comparison strategy," in which it enters only the highest-priced markets, and incumbents engage in limit-pricing behavior. The influence on pricing of the number of markets and the scope of entry is also reported. Finally, the theory indicates that limit pricing may in fact deter entry with the entrant choosing to enter no market whatsoever. Throughout, the central feature of the analysis is that an incumbent's price affects its investment incentives, with lower prices being complementary to greater investment.

PD August 1991. **TI** Competitive Limit Pricing under Imperfect Information. **AA** Stanford University and Northwestern University. **SR** Stanford Hoover Institute Working Paper in Economics: E-91-12; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 40. **PR** not available. **JE** L12, D42, L41. **KW** Pricing. Investment. Entry Deterrence. Monopoly. Limit Pricing.

AB This paper offers a new theory of limit pricing. Incumbents from different markets or regions "compete" against one another, with each attempting to price in a manner that deflects entry into the others' markets. An entrant is imperfectly informed as to the incumbents' respective investments in cost reduction and seeks to enter markets in which incumbents have high costs. In the focal equilibrium, the entrant uses a simple "comparison strategy," in which it enters only the highest priced markets, and incumbents engage in limit pricing behavior. The influence on pricing of the number of markets and the scope of entry is also reported. Finally, the theory indicates that limit pricing may in fact deter entry, with the entrant choosing to enter no market whatsoever. Throughout, the central feature of the analysis is that an incumbent's price affects its investment incentives, with lower prices being complementary to greater investment.

PD November 1991. **TI** Pricing to Signal Product Line Quality. **AA** Stanford University and Northwestern University. **SR** Stanford Hoover Institute Working Paper in Economics: E-91-11; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 36. **PR** not available. **JE** L12, D42, L15. **KW** Pricing. Product Quality. Signaling. Monopoly.

AB This paper offers a general characterization of the optimal product line prices for a monopolist whose quality of products is initially unknown to consumers. In the focal equilibrium, a monopolist signals a high-quality product line by pricing as if quality were known to be high but costs of production were higher than they truly are. In a rich set of environments, this characterization implies that the prices of all products are initially distorted upward, with the price distortion being largest for products with the most inelastic demands and/or quality sensitive production costs. These implications yield predictions for the time path of prices that are broadly consistent with evidence from the marketing literature. The multidimensional signaling problem is made tractable by the satisfaction of a very simple and powerful single crossing property.

Bagwell, Laurie Simon

PD December 1991. **TI** Conspicuous Consumption, Pure Profits, and the Luxury Tax: Some Surprising Consequences of Perfect Competition. **AU** Bagwell, Laurie Simon; Bernheim, B. Douglas. **AA** Bagwell: Stanford University and Northwestern University. Bernheim: Princeton University and National Bureau of Economic Research. **SR** Stanford Hoover Institute Working Paper in Economics: E-91-15; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 31. **PR** not available. **JE** D82, H21, D11, D41, D21. **KW** Consumption. Luxury Tax. Taxation. Firm Behavior. Profits. Signaling.

AB We examine a model of conspicuous consumption and explore the nature of competition in markets for conspicuous goods. We assume that, in addition to intrinsic utility, individuals seek status, and that perceptions of wealth affect status. Under identifiable conditions, equilibria are characterized by the existence of "budget" brands (which are sold at a price equal to marginal cost), as well as "luxury" brands (which are sold at a price above marginal cost, despite the fact that producers are perfectly competitive). Luxury brands are not intrinsically superior to budget brands, but are purchased by consumers who seek to signal high levels of wealth. Our analysis implies that, up to some threshold rate, the luxury tax is a non-distortionary tax on pure profits.

Baker, Paul

PD October 1990. **TI** The Simulation of Indirect Tax Reforms: The IFS Simulation Program for Indirect Taxation (SPIT). **AU** Baker, Paul; McKay, Stephen; Symons, Elizabeth. **AA** Baker and Mckay: Institute for Fiscal Studies. Symons: Keele University and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/11; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 40. **PR** 3 pounds. **JE** D12, E21, H21. **KW** Indirect Taxes. Households. Consumer Demand. Consumer Economics. Taxation.

AB This IFS Simulation Program for Indirect Taxation (SPIT) is a micro- computer based simulation program designed to analyze the expenditure, welfare and revenue consequences of changes to UK indirect tax system. The purpose of this paper is to outline the operation of the SPIT program and to provide details of the empirical model and estimation upon which it is based. In both estimation and simulation, use is made of an extensive database of individual household level data drawn from seventeen years of the UK Family Expenditure Survey (FES). Estimation is conducted within the framework of an overall demand system the parameters of which reveal the importance of demographic expenditure behavior at the microeconomic level. Simulations are conducted over a single year of FES data, enabling both analysis of the distributional impact of tax policy and the generation of grossed-up aggregate national level predictions of consumers expenditures and government revenues.

Baldwin, Richard E.

PD December 1991. **TI** Exchange Rate Hysteresis: Large Versus Small Policy Misalignments. **AU** Baldwin, Richard E.; Lyons, Richard K. **AA** Baldwin: Columbia University, National Bureau of Economic Research, and Center for Economic Policy Research. Lyons: National Bureau of Economic Research and Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-28; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 23. **PR** \$5.00 academic and non-profit institutions; \$6.00 corporations (add \$1.00 for foreign requests). **JE** F31, F41, O42. **KW** Monetary Policy. Exchange Rate. International Trade. Trade Balance.

AB Using a monetary model in the spirit of Dornbusch (1976) and a sunk cost model of trade hysteresis we show that a sufficiently large policy misalignment can induce hysteresis in the trade balance and thereby alter the steady-state real exchange rate. Hence, exchange rate dynamics are path dependent. Since hysteresis in our model can entail industrial

https://doi.org/10.1017/S0951007900002576 Published online by Cambridge University Press

dislocation and the scrappage of sunk assets, we suggest that these factors constitute a welfare cost of large policy misalignments that have not been considered formally. Additionally, since the long-run exchange rate is path dependent, standard empirical tests of exchange rate models may involve a misspecification.

Baldwin, Robert E.

PD July 1991. **TI** Are Economists' Traditional Trade Policy Views Still Valid? **AA** University of Wisconsin, Madison. **SR** National Bureau of Economic Research Working Paper: 3793; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 63. **PR** $3.00. **JE** F12, F13. **KW** Trade Policy. Free Trade. Technological Change. Imperfect Competition.

AB Recent analysis of trade policies under imperfectly competitive market conditions as well as in situations where trade in high-technology products is important have raised doubts whether economists should continue their traditional opposition to trade taxes and subsidies. This paper evaluates the new theoretical arguments for interventionist trade policies by comparing them with the traditional arguments for and against free trade, investigating the empirical evidence supporting the conditions assumed in the new models, appraising the realism of the behavior assumptions of these models and the sensitivity of their conclusions to changes in these assumptions, and considering the political economy implications of these conclusions.

Ball, Laurence

PD January 1992. **TI** Disinflation with Imperfect Credibility. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3983; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E42, E52, E31, E10. **KW** Inflation. Monetary Policy. Macroeconomics.

AB This paper presents a theory of the real effects of disinflation. As in New Keynesian models, price adjustment is staggered across firms. As in new Classical models, credibility is imperfect: the monetary authority may not complete a promised disinflation. The combination of imperfect credibility and staggering yields more plausible results than either of these assumptions alone. In particular, an announced disinflation reduces expected output if credibility is sufficiently low.

Ballabriga, Fernando C.

PD December 1991. **TI** Investigating Private and Public Saving-Investment Gaps in EC Countries. **AU** Ballabriga, Fernando C.; Dolado, Juan J.; Vinals, Jose. **AA** Ballabriga and Dolado: Banco de Espana. Vinals: Bank for International Settlements. **SR** Centre for Economic Policy Research Discussion Paper: 607; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 30. **PR** 3 POUNDS ($5.00). **JE** E21, H62, D91. **KW** Savings. Deficit Spending. Budget Constraint.

AB This paper uses cointegration techniques to assess the extent to which the behavior of private and public sector savings and investment and those of the nation as a whole have been consistent with long-term solvency over the last three decades. In addition, an attempt is made to analyze whether excessive budget deficits might have undermined the nation's long-run external solvency. We find evidence that a number of countries violate both domestic intertemporal budget constraints, but nevertheless satisfy the nation's budget constraint. In most cases this has occurred because changes in government deficits have been offset by changes in private savings and investment and by the use of capital controls.

Barbosa, A. S. Pinto

PD October 1991. **TI** An Optimal Constitution in a Stochastic Environment. **AU** Barbosa, A. S. Pinto; Jovanovic, Boyan. **AA** Barbosa: New University of Lisbon. Jovanovic: New York University and University of Pennsylvania. **SR** New York University Economic Research Reports: 91-56; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 25. **PR** no charge. **JE** D74, P16, H11. **KW** Political Economy. Conflict. Constitution. Social Order.

AB This paper analyzes how political stability depends on economic factors. Fluctuations in groups' economic capacities and in their abilities to engage in rent-seeking or predatory behavior create periodic incentives for those groups to renege on their social obligations. A constitution remains in force so long as no party wishes to defect to the noncooperative situation, and it is reinstituted as soon as each party finds it to its advantage to revert to cooperation. Partnerships of equals are easier to sustain than are arrangements in which one party is more powerful in some economic or noneconomic trait. In this sense, inequality is bad for social welfare. Surprisingly, perhaps, it is the rich, and not the poor segments of society who in our model pose the greater threat to the stability of the social order.

Barro, Robert J.

PD July 1991. **TI** Public Finance in Models of Economic Growth. **AU** Barro, Robert J.; Sala-i-Martin, Xavier. **AA** Barro: Harvard University. Sala-i-Martin: Yale University. **SR** Yale Economic Growth Center Discussion Paper: 640; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 33. **PR** $2.00 + postage. **JE** O41, H21, E22, E62. **KW** Endogenous Growth. Economic Growth. Fiscal Policy. Growth Model. Taxes. Capital. Public Finance.

AB The recent literature on endogenous economic growth allows for effects of fiscal policy on long-term growth. If the social rate of return on investment exceeds the private return, then tax policies that encourage investment can raise the growth rate and levels of utility. An excess of the social return over the private return can reflect learning-by-doing with spillover effects, the financing of government consumption purchases with an income tax, and monopoly pricing of new types of capital goods. Tax incentives for investment are not called for if the private rate of return on investment equals the social return. This situation applies in growth models if the accumulation of a broad concept of capital does not entail diminishing returns, or if technological progress appears as an expanding variety of consumer products. In growth models that incorporate public services, the optimal tax policy hinges on the characteristics of the services.

PD July 1991. **TI** Convergence. **AU** Barro, Robert J.; Sala-i-Martin, Xavier. **AA** Barro: Harvard University. Sala-i-Martin: Yale University. **SR** Yale Economic Growth Center Discussion Paper: 645; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520.

PG 44. **PR** $2.00 + postage. **JE** E13, D31, R11, R12. **KW** Regional Economics. Economic Growth. Neoclassical Model.

AB A key economic issue is whether poor countries or regions tend to grow faster than rich ones: are there automatic forces that lead to convergence over time in the levels of per capita income and product? We use the neoclassical growth model as a framework to study convergence across the 48 contiguous U.S. states. We exploit data on personal income since 1840 and on gross state product since 1963. The U.S. states provide clear evidence of convergence, but the findings can be reconciled quantitatively with the neoclassical model only if diminishing returns to capital set in very slowly. The results for per capita GDP from a broad sample of countries are similar if we hold constant a set of variables that proxy for differences in steady-state characteristics.

PD March 1992. **TI** Public Finance in Models of Economic Growth. **AU** Barro, Robert J.; Sala-i-Martin, Xavier. **AA** Barro: Harvard University. Sala-i-Martin: Yale University. **SR** Centre for Economic Policy Research Discussion Paper: 630; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 37. **PR** 3.00 pounds or $5.00. **JE** O41, H21, E22, E62. **KW** Economic Growth. Fiscal Policy. Public Finance. Growth Model. Taxes. Capital.

AB The recent literature on endogenous economic growth allows for the effects of fiscal policy on long-term growth. If the social rate of return on investment exceeds the private return, tax policies that encourage investment can raise the growth rate and levels of utility. An excess of the social return over the private return can reflect learning-by-doing with spillover effects, the financing of government consumption purchases with an income tax, and monopoly pricing of new types of capital goods. Tax incentives for investment are not called for if the private rate of return on investment equals the social return. This situation applies in growth models if the accumulation of a broad concept of capital does not entail diminishing returns, or if technological progress appears as an expanding variety of consumer products. In growth models that incorporate public services, the optimal tax policy hinges on the characteristics of the services.

Barros, Ricardo

TI Wage Inequality and the Distribution of Education: A Study of the Evolution of Regional Differences in Inequality in Metropolitan Brazil. **AU** Almeida dos Reis, Jose Guilherme; Barros, Ricardo.

PD September 1990. **TI** Aggregating Inequalities: The Equalizing Impact of the Earnings of Married Women in Metropolitan Brazil. **AU** Barros, Ricardo; Pinto de Mendonca, Rosane Silva. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 607; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 38. **PR** $2.00 + postage. **JE** O15, J21, O54. **KW** Labor Supply. Brazil. Income Distribution.

AB The Brazilian family underwent profound transformations during the past decade with potentially important implications for the evolution of income inequality. In this study we analyze the impact on inequality of one of these transformations: the rise in wives' labor force participation rates. We show that necessary conditions for wives' earnings to have impact on income inequality are: (1) a correlation among spouses' earnings different from one, and /or (2) a different level of income inequality among wives than among husbands. Moreover, it is also shown that if inequality in earnings among wives is smaller than among husbands, then the inclusion of wives' earnings will always have an equalizing impact on the distribution of income among families. We demonstrate that the correlation among spouses' earnings is around 0.4 and that the level of earnings inequality is more than 50% higher among wives than among husbands.

Barsky, Robert B.

PD February 1992. **TI** Why does the Stock Market Fluctuate? **AU** Barsky, Robert B.; De Long, J. Bradford. **AA** Barsky: University of Michigan, Ann Arbor and National Bureau of Economic Research. De Long: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3995; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G14, E32, E22, E44, G35. **KW** Dividends. Growth Rate. Forecasting. Investment. Stock Market.

AB Large long-run swings in the United States stock market over the past century correspond to swings in estimates of fundamental values calculated by using a long moving average of past dividend growth to forecast future growth rates. Such a procedure would have been reasonable if investors were uncertain of the structure of the economy, and had to make forecasts of unknown and possibly changing long-run dividend growth rates. The parameters of the stochastic process followed by dividends over the twentieth century cannot be precisely estimated even today at the century's end. Investors in the past had even less information about the dividend process. In such a context, it is difficult to see how investors can be faulted for implicitly forecasting future dividends by extrapolating past dividend growth.

Bartel, Ann P.

PD November 1991. **TI** Productivity Gains from the Implementation of Employee Training Programs. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3893; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** $3.00. **JE** J24, E23, L60, M12. **KW** Productivity. Manufacturing. Employee Training. Labor Productivity.

AB This paper utilizes data on the personnel policies and economic characteristics of businesses in the manufacturing sector to study the relationship between employee training and labor productivity. The major finding is that businesses that were operating below their expected labor productivity levels in 1983 implemented new employee training programs after 1983 which resulted in significantly larger increases in labor productivity growth between 1983 and 1986. This higher rate of productivity growth was sufficient to bring these businesses up to the labor productivity levels of comparable businesses by 1986. The positive effects of training implementation on productivity growth were shown to be inconsistent with a "Hawthorne Effect" interpretation because the implementation of new personnel policies other than training did not have significant effects on productivity growth.

Bateman, Fred

TI Whom did Protective Legislation Protect? Evidence from 1880. **AU** Atack, Jeremy; Bateman, Fred.

Bayoumi, Tamim

TI Apartheid, Growth and Income Distribution in South Africa: Past History and Future Prospects. **AU** Corker, Robert; Bayoumi, Tamim.

PD January 1992. **TI** Shocking Aspects of Monetary Unification. **AU** Bayoumi, Tamim; Eichengreen, Barry. **AA** Bayoumi: Bank of England. Eichengreen: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3949; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F15, F36, O52, F33. **KW** Europe. Monetary Union. Economic Integration.
AB Data on output and prices for 11 EC member nations are analyzed to extract information on underlying aggregate supply and demand disturbances using a VAR decomposition. The coherence of the underlying shocks are then compared to the results from U.S. regional data. We find that the underlying shocks are significantly more idiosyncratic across EC countries than across U.S. regions, which may indicate that the EC countries will find it more difficult to operate a monetary union. However a core of EC countries, made up of Germany and her immediate neighbors, experience shocks of similar magnitude and cohesion as the U.S. regions. EC countries also exhibit a slower response to aggregate shocks than U.S. regions, presumably reflecting lower factor mobility.

PD January 1992. **TI** Is There a Conflict between EC Enlargement and European Monetary Unification? **AU** Bayoumi, Tamim; Eichengreen, Barry. **AA** Bayoumi: Bank of England. Eichengreen: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3950; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F15, F36, F33. **KW** Europe. Monetary Union. Economic Integration. Financial Markets.
AB Recent proposals for enlarging the European Community to include the EFTA countries raise the question of whether the new members should participate in a European Monetary Union. In part, the issue hinges on the incidence of aggregate supply and demand disturbances. We use data on prices and output and a VAR decomposition to analyze this issue empirically, grouping economies according to the magnitude of the disturbances, their cross-country correlation, and speeds of response. This leads us to distinguish an EC "core" (made up of Germany and its immediate neighbors) and an EC periphery (made up of the U.K. and the Southern European members of the Community). Austria, Sweden and Switzerland behave more similarly to the EC core than do Norway, Finland, and Iceland. This suggests that the case for EMU participation is stronger for Austria, Sweden and Switzerland than for the other EFTA countries.

PD January 1992. **TI** Shocking Aspects of Monetary Unification. **AU** Bayoumi, Tamim; Eichengreen, Barry. **AA** Bayoumi: Bank of England. Eichengreen: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3949 ; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $3.00. **JE** F33, F41, F42, O52. **KW** Monetary Policy. Monetary Union. Europe.
AB Data on output and prices for 11 EC member nations are analyzed to extract information on underlying aggregate supply and demand disturbances using a VAR decomposition. The coherence of the underlying shocks across countries and the speed of adjustment to these shocks are then compared to the results from U.S. regional data. We find that the underlying shocks are significantly more idiosyncratic across EC countries than across U.S. regions which may indicate that the EC will find it more difficult to operate a monetary union. However a core of EC countries, made up of Germany and her immediate neighbors, experience shocks of similar magnitude and cohesion as the U.S. regions. EC countries also exhibit a slower response to aggregate shocks than U.S. regions, presumably reflecting lower factor mobility.

PD January 1992. **TI** Is There a Conflict between EC Enlargement and European Monetary Unification. **AU** Bayoumi, Tamim; Eichengreen, Barry. **AA** Bayoumi: Bank of England. Eichengreen: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3950; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 18. **PR** $3.00. **JE** F33, F42, O52, F41. **KW** Monetary Policy. European Community. Monetary Union.
AB Recent proposals for enlarging the European Community to include the EFTA countries raise the question of whether the new members should participate in a European Monetary Union. In part, the issue hinges on the incidence of aggregate supply and demand disturbances. We use data on prices and output and a VAR decomposition to analyze this issue empirically, grouping economies according to the magnitude of the disturbances, their cross-country correlation, and speeds of response. This leads us to distinguish an EC "core" (made up of Germany and its immediate neighbors) and an EC periphery (made up of the U.K. and the Southern European members of the Community). Austria, Sweden and Switzerland behave more similarly to the EC core than do Norway, Finland and Iceland. This suggests that the case for EMU participation is stronger for Austria, Sweden and Switzerland than for the other EFTA countries.

Bebchuk, Lucian

PD February 1991. **TI** The Effect of Insider Trading on Insiders' Reaction to Opportunities to "Waste" Corporate Value. **AU** Bebchuk, Lucian; Fershtman, Chaim. **AA** Bebchuk: Harvard University. Fershtman: Tel Aviv University. **SR** National Bureau of Economic Research Technical Paper: 95; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G31, G32. **KW** Corporations. Insider Trading.
AB This paper analyzes certain effects of insider trading on the principal-agent problem in corporations. Specifically, we focus on those managerial choices that confront managers with the need to decide between options that produce different corporate value but do not differ in the managerial effort involved. In the absence of insider trading, and as long as managers' salaries are positively correlated with their firm's results, managers will make such choices efficiently, and consequently such choices have previously received little

attention. We show that, in the presence of insider trading, mangers may make such choices inefficiently. With such trading, managers might elect to have a lower corporate value - that is, they may "waste" corporate value - because having such a value might enable them to make greater trading profits. We analyze the conditions under which the problem we identify is likely to arise and the factors that determine its severity. We also identify those restrictions on insider trading that can eliminate this problem.

PD February 1991. **TI** The Effects of Insider Trading on Insider's Choice among Risky Investment Projects. **AU** Bebchuk, Lucian; Fershtman, Chaim. **AA** Bebchuk: Harvard University. Fershtman: Tel Aviv University. **SR** National Bureau of Economic Research Technical Paper: 96; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G31, G32. **KW** Investment Policy. Insider Trading.

AB This paper studies certain effects of insider trading on the principal-agent problem corporations. Specifically, we focus on insiders' choice among investment projects. Other things equal, insider trading leads insiders to choose riskier investment projects, because increased volatility of results enables insiders to make greater trading profits if they learn these results in advance of the market. This effect might or might not be beneficial, however, because insider's risk aversion pulls them toward a conservative investment policy. We identify and compare insiders' choices of projects with insider trading and without such trading, thus identifying the effects that allowing such trading has on other elements of insiders' compensation. Using these results, we identify the conditions under which insider trading increases or decreases corporate value by affecting the choice of projects with uncertain returns.

PD February, 1991. **TI** Bargaining and the Division of Value in Corporate Reorganization. **AU** Bebchuk, Lucian; Chang, Howard F. **AA** Bebchuk: Harvard University. Chang: Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Technical Paper: 97; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G34, G32, G33. **KW** Restructuring. Corporations. Ownership Structure. Bargaining. Bankruptcy.

AB This paper develops a sequential bargaining model of the negotiations in corporate reorganizations under Chapter 11. We identify the expected outcome of the bargaining process and examine the effects of the legal rules that shape the bargaining. We determine how much value equity holders and debt holders receive under the Chapter 11 process, and compare the value obtained by each class with the "contractual right" of that class. We identify and analyze three reasons that the equityholders can expect to obtain some value even when the debtholders are not paid in full. Finally, we show how the features of the reorganization process and of the company filing under Chapter 11 affect the division of value, and in this way we provide several testable predictions.

PD March 1991. **TI** Do Short-Term Managerial Objectives Lead to Under- or Over-Investment in Long-Term Projects? **AU** Bebchuk, Lucian; Stole, Lars. **AA** Bebchuk: Harvard University. Stole: Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Technical Paper: 98; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G31. **KW** Investment Policy. Corporations.

AB This paper studies managerial decisions about investment in long-run projects in the presence of imperfect information (the market knows less about such investments than the firm's managers) and short-term managerial objectives (the managers are concerned about the short-term stock price as well as the long-term stock price). Prior work has suggested that imperfect information and short-term managerial objectives induce managers to underinvest in long-run projects. We show that either underinvestment or overinvestment is possible, and we identify the connection between the type of informational imperfection present and the direction of the distortion. When investors cannot observe the level of investment in long-run projects, suboptimal investment will be induced. When investors can observe investment but not its productivity, however, an excessive level of investment will be induced.

Beghin, John C.

PD April 1991. **TI** Trade and Efficiency Effects of Domestic Content Protection: The Australian Tobacco and Cigarette Industries. **AU** Beghin, John C.; Lovell, C. A. Knox. **AA** University of North Carolina. **SR** University of North Carolina Working Paper Series: 91-5; Department of Economics, CB #3305, Gardner Hall, University of North Carolina, Chapel Hill, NC 27599-3305. **PG** not available. **PR** not available. **JE** F13, F14, Q17. **KW** International Trade. Trade Policy. Trade Regulation. Tobacco Industry.

AB This paper provides an empirical investigation of the international trade and domestic market efficiency effects of physical domestic content requirement in the Australian tobacco leaf growing and cigarette manufacturing industries. Our empirical evidence suggests that the content requirement has distorted trade by restricting leaf imports. Nevertheless, the data are also consistent with the efficient contract hypothesis. The mix of domestic to imported leaf used in cigarette manufacturing depends on domestic leaf production costs and on world leaf prices, but not on the negotiated domestic leaf price.

Bekaert, Geert

PD July 1991. **TI** Characterizing Predictable Components in Excess Returns on Equity and Foreign Exchange Markets. **AU** Bekaert, Geert; Hodrick, Robert J. **AA** Northwestern University. **SR** National Bureau of Economic Research Working Paper: 3790; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G15, G12, G14. **KW** Excess Returns. Foreign Exchange. Forecasting.

AB The paper characterizes predictable components in excess rates of returns on major equity and foreign exchange markets using lagged excess returns, dividend yields, and forward premiums as instruments. Vector autoregressive techniques demonstrate one-step-ahead predictability and provide implied long-horizon statistics. We estimate latent variable models as constrained counterparts to the VARs. The predictability of returns is related to asset pricing models by examining the volatility bounds on intertemporal marginal rates of substitution.

PD July 1991. **TI** Characterizing Predictable Components in Excess Returns on Equity and Foreign Exchange Markets. **AU** Bekaert, Geert; Hodrick, Robert J. **AA** Northwestern University. **SR** National Bureau of Economic Research

Working Paper: 3790; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** $3.00. **JE** G12, G15, F31, G14. **KW** Asset Pricing. Foreign Exchange. Forecasting.

AB The paper characterizes predictable components in excess rate of return on major equity and foreign exchange markets using lagged excess returns, dividend yields, and forward premiums as instruments. Vector autoregressive techniques demonstrate one-step-ahead predictability and provide implied long-horizon statistics. We estimate latent variable models as constrained counterparts to the VARs. The predictability of returns is related to asset pricing models by examining the volatility bounds on intertemporal marginal rates of substitution.

Benhabib, Jess

PD November 1991. **TI** Indeterminacy and Increasing Returns. **AU** Benhabib, Jess; Farmer, Roger E. A. **AA** Benhabib: New York University. Farmer: University of California, Los Angeles. **SR** New York University Economic Research Reports: 91-59; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 24. **PR** no charge. **JE** O41, E32, O47. **KW** Growth Model. Business Cycle. Factor Productivity.

AB We investigate the properties of the one sector growth model with increasing returns. Two possible organizational structures are provided, each of which is capable of reconciling the existence of increasing returns in the aggregate technology with competitive behavior by firms. The first of these involves input externalities and the second involves monopolistic competition. We show, for parametric values that are in close accord with recent literature in real business cycle theory, that the model displays an indeterminate steady state. We point out that one may exploit this indeterminacy to generate a model of business cycle fluctuations that is driven by the self-fulfilling beliefs of the agents in the model. Our analysis is conducted in two classes of growth models. In the first; growth is generated by exogenous increases in factor productivity. In the second; we allow the marginal product of capital to be large enough for endogenous growth to occur. In both classes of models we show that there may be an indeterminate steady state.

PD December 1991. **TI** Growth Accounting with Physical and Human Capital Accumulation. **AU** Benhabib, Jess; Spiegel, Mark. **AA** New York University. **SR** New York University Economic Research Reports: 91-66; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 28. **PR** no charge. **JE** O47, O41. **KW** Growth Model. Human Capital. Economic Growth. Capital.

AB Using a growth accounting method based upon a Cobb-Douglas production function, we derive a reduced form equation which directly links growth in per capita income levels to rates of growth in factors of production. Estimation of this equation, however, requires estimates of physical and human capital stocks, because the use of investment to income ratios are inappropriate if capital-output ratios vary across countries and time. We construct estimates of physical and human capital accumulation rates. We then use this data in growth accounting estimation. We find that human capital accumulation rates do not enter into per capita income growth once physical capital accumulation rates are correctly specified. However, human capital does contribute positively to physical capital accumulation rates, which measurably enter into growth. Similarly, domestic political instability is shown to affect growth indirectly, through its impact on physical capital accumulation, rather than directly entering into the growth accounting equation.

Bental, Benjamin

PD October 1991. **TI** Searching for Investment Opportunities: A Micro Foundation for Endogenous Growth. **AU** Bental, Benjamin; Peled, Dan. **AA** Bental: Israel Institute of Technology. Peled: University of Western Ontario and Israel Institute of Technology. **SR** University of Western Ontario Department of Economics Research Report: 9112; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 31. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** O47, D24, O32. **KW** Economic Growth. Scale Economies. Production Theory. Factor Productivity.

AB Recent literature on the phenomenon of sustained growth has emphasized the role of increasing returns to scale technologies. We suggest in this paper a microeconomic foundation for the existence of increasing returns technologies. Production is assumed to require a combination of capital and labor in a standard, constant returns to scale technology. However, this technology is affected multiplicatively by a productivity factor. This factor is assumed to be a result of a research and development process. The R&D process is modeled as a search problem. Firms face a known fixed distribution of productivity factors from which they can sample. Sampling, is costly in terms of capital, and therefore firms, which posses a certain amount of capital, have to decide when to stop sampling, hire labor in a competitive labor market, and invest the remainder of their capital in the CRS technology multiplied by the productivity factor they have uncovered. The paper analyzes the search problem faced by the firms, and shows that under certain assumptions about the probability distribution function which governs the behavior of the productivity factor, output is likely to display increasing returns to scale with respect to capital (in a probabilistic sense).

Bentolila, Samuel

PD December 1991. **TI** The Macroeconomic Impact of Flexible Labour Contracts: An Application to Spain. **AU** Bentolila, Samuel; Saint-Paul, Gilles. **AA** Bentolila: Centro Estudios Monetarios y Financieros. Saint-Paul: DELTA. **SR** Centre for Economic Policy Research Discussion Paper: 596; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 48. **PR** 3 Pounds ($5.00). **JE** E24, O52, J23, J51, E32. **KW** Labor Contracts. Employment. Spain. Business Cycle.

AB This paper constructs a theoretical model to study the effect on employment of the introduction of flexible labor contracts. (i.e. with low firing costs), which occurred in many European countries in the 1980's, which it then tests on Spanish data. The model predicts that such contracts increase the size of the employment response to aggregate shocks, while decreasing its persistence, and that employment overshoots its long-run level at the time these contracts are introduced. Econometric estimates of labor demand based on a panel of large Spanish industrial firms are consistent with several of the model's implications, in particular the increase in the cyclical response of employment.

Berger, Allen N.

PD November 1991. **TI** The Profit-Concentration Relationship in Banking. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 176; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 29. **PR** no charge. **JE** G21, G34, L11. **KW** Banking. Mergers. Market Structure.

AB This paper enters the debate between market power and efficient structure explanations of the profit-concentration relationship in banking by adding direct measures of efficiency to the empirical analysis. Such an analysis may be important to bank merger policy considerations, since mergers intended to achieve market power gains and those intended to achieve efficiency gains may have very different social implications. Structural models of two market power hypotheses are expressed in a single reduced form for profits with different parametric restrictions for testing. Unlike previous efforts, efficiency variables are explicitly modeled, so that a single coefficient can not be construed as supportive of multiple hypotheses. This is also the first study to test whether efficiency affects market structure, a key necessary condition of the efficient structure hypotheses. In addition, it is the first to include efficiency measures in price-concentration equations. The methodology is applied to 30 relatively large cross-sections of banks from the 1980's. The data are consistent with the X-efficiency version of the efficient structure hypothesis and limited support is also found for two of the other hypotheses. However, none of the hypotheses tested appear to be of overwhelming importance in explaining bank profits, suggesting that bank merger efforts to achieve substantial profit increases may be difficult to achieve.

Bernheim, B. Douglas

TI Conspicuous Consumption, Pure Profits, and the Luxury Tax: Some Surprising Consequences of Perfect Competition. **AU** Bagwell, Laurie Simon; Bernheim, B. Douglas.

Bernstein, Jeffrey I.

PD January 1992. **TI** Information Spillovers, Margins, Scale and Scope: With an Application to Canadian Life Insurance. **AA** Carleton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3979; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G22, L11, L22. **KW** Insurance. Pricing. Information.

AB This paper develops a model of the production of life insurance services. The focus is on price setting ability and the cost advantages from size and diversity. The model characterizes insurers decisions on the face value, the number of policies, and the number of insurance lines. The model is applied to Canadian life insurance firms. Price-cost margins average from 13% to 40%. These margins emanate from information spillovers generated by marketing activities. Cost advantages due to size are small, but are substantial from diversity. Returns to scale average from 1.13 to 1.40, while returns to scope average from 70% to 100%.

PD January 1992. **TI** Price Margins and Capital Adjustment: Canadian Mill Products and Pulp and Paper Industries. **AA** Carleton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3982; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** L11, L16, L22, L73. **KW** Competition. Technological Change. Scale Economies.

AB The purpose of this paper is to estimate a model incorporating noncompetitive behavior in product and factor markets. In addition, capital accumulation is subject to adjustment costs so that firms are not constrained to be in long-run equilibrium. The model is applied to two major Canadian manufacturing industries; pulp and paper and mill products. The results show for both industries in each of the three product markets and the wood input market that there is competitive behavior. In addition, the industries are not in long-run equilibrium as marginal costs cause marginal profit to exceed the rental rate on capital. With the industries exhibiting short-run competitive behavior in product and factor markets, new estimates are derived for scale economies and rates of technological change. Unlike the results from other studies, both industries exhibit small scale economies and positive rates of technological change.

Bertola, Giuseppe

PD September 1991. **TI** Trigger Points and Budget Cuts: Explaining the Effects of Fiscal Austerity. **AU** Bertola, Giuseppe; Drazen, Allan. **AA** Bertola: Princeton University and National Bureau of Economic Research. Drazen: University of Maryland, College Park and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3844; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 16. **PR** $3.00. **JE** E62, E21, D91, D84. **KW** Fiscal Policy. Expectations. Consumption. Government Spending.

AB We propose and solve an optimizing model which explains counter-intuitive effects of fiscal policy in terms of expectations. If government spending follows an upward-trending stochastic process which the public believes may fall sharply when it reaches specific "target points," then optimizing consumption behavior and simple budget constraint arithmetic imply a nonlinear relationship between private consumption and government spending. This theoretical relation is consistent with the experience of several countries.

PD October 1991. **TI** Factor Shares and Savings in Endogenous Growth. **AA** Princeton University. **SR** Centre for Economic Policy Research Discussion Paper: 576; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 23. **PR** 3 pounds ($5.00). **JE** O47, O41, D33. **KW** Economic Growth. Income Distribution.

AB This paper studies the distributive effects of growth when different agents' income is drawn from accumulated and non-accumulated factors of production in different proportions. It also notes that political interactions may contribute to determine factor shares and growth when income sources are heterogeneous, and suggests that distributional issues should be taken into account both when formulating growth-oriented policy prescriptions and when interpreting the wide dispersion of growth rates across economies and over time.

PD December 1991. **TI** Trigger Points and Budget Cuts: Explaining the Effects of Fiscal Austerity. **AU** Bertola, Giuseppe; Drazen, Allan. **AA** Bertola: Princeton University. Drazen: University of Maryland. **SR** Centre for Economic

Policy Research Discussion Paper: 599; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 16. **PR** 3 Pounds ($5.00). **JE** E62, E21, D91, D84. **KW** Fiscal Policy. Government Spending. Consumption. Expectations.

AB We present and analyze an optimizing model which explains the counter-intuitive effects of fiscal policy in terms of expectations. If government spending follows an upward-trending stochastic process, which the public believes may fall sharply when it reaches specific "target points," then optimizing consumption behavior and simple budget constraint arithmetic imply a non-linear relationship between private consumption and government spending. This theoretical relation is consistent with the experience of several countries.

PD December 1991. **TI** Labour Turnover Costs and Average Labour Demand. **AA** Princeton University. **SR** Centre for Economic Policy Research Discussion Paper: 601; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 13. **PR** 3 pounds ($5.00). **JE** J63, J23. **KW** Turnover Costs. Labor Demand. Employment.

AB The effect of labor turnover costs on average employment in a partial equilibrium model of labor demand, depends on the form of the revenue function, on the rates of discount and labor attrition, and on the relative size of hiring and firing costs. If discount and attrition rates are strictly positive, firing costs may well increase average employment even when hiring costs reduce it.

Bhandari, Jagdeep S.

TI Speculative Attacks and Models of Balance-of-Payments Crises. **AU** Agenor, Pierre-Richard; Bhandari, Jagdeep S.; Flood, Robert P.

TI Speculative Attacks and Models of Balance-of-Payments Crises. **AU** Agenor, Pierre-Richard; Bhandari, Jagdeep S.; Flood, Robert P.

Blackburn, Keith

PD 1991. **TI** Money and Growth. **AU** Blackburn, Keith; Hung, Victor T. Y. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9110; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 7. **PR** no charge. **JE** E51, O11, O41, O42. **KW** Money Supply. Monetary Policy. Growth Model. Endogenous Growth.

AB Money is introduced into an endogenous growth model. We show that the competitive balanced growth equilibrium is inefficient and exhibits an inverse relation between money growth and real growth. Efficiency can be restored by means of a well-known optimum money supply rule.

PD September 1991. **TI** Univariate Detrending of Macroeconomic Time Series. **AU** Blackburn, Keith; Ravn, Morten O. **AA** Blackburn: University of Southampton. Ravn: University of Southampton and University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-22; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 37. **PR** no charge. **JE** C22, E32. **KW** Business Cycle. Time Series Model. Detrending. Filtering.

AB We compare and contrast the implications of alternative univariate methods for the secular-cyclical decomposition of macroeconomic time series. We study these methods theoretically and empirically in both the time and frequency domains. Our interest is in the extent to which measures of business cycle activity are sensitive to the method of low-frequency filtering, the horizon over which business cycles are defined and the sample period under investigation. We find that, both quantitatively and qualitatively, many of these measures are broadly independent of such considerations. Attention is drawn to the most notable exceptions.

PD October 1991. **TI** Growth through Cooperation. **AU** Blackburn, Keith; Ravn, Morten O. **AA** Blackburn: University of Southampton. Ravn: University of Southampton and University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-27; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 22. **PR** no charge. **JE** E61, F42, O11, F43. **KW** Endogenous Growth. Policy Coordination. Economic Growth. Externalities.

AB The paper is concerned with public policy and economic development in a world of interdependent economies. Its objective is to construct a simple example of how the international coordination of economic policy offers a means of promoting growth across countries. The example is based on a two country endogenous growth model in which the production of human capital depends on country-specific tax-financed public expenditure and worldwide previously accumulated knowledge. We consider optimal policy as the outcome of a dynamic game between benevolent governments. We show that both growth (which has no normative significance, itself) and welfare are, indeed, higher under cooperation than under noncooperation. The innovations of the paper are the endogenization of policy in an international policy coordination.

Blackburn, McKinley L.

PD November 1991. **TI** Changes in Earnings Differentials in the 1980's: Concordance, Convergence, Causes, and Consequences. **AU** Blackburn, McKinley L.; Bloom, David E.; Freeman, Richard B. **AA** Blackburn: University of South Carolina. Bloom: Columbia University and National Bureau of Economic Research. Freeman: London School of Economics and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3901; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** $3.00. **JE** J31, J11. **KW** Wage Differentials. Demographic Trends. Education.

AB This paper analyzes changes in U.S. earning differentials in the 1980's between race, gender, age, and schooling groups. There are four main sets of results to report. First, the economic position of less-educated workers declined relative to the more-educated among almost all demographic groups. Second, much of the change in education-earnings differentials for specific groups is attributable to measurable economic factors. Third, the earnings and employment position of white females, and to a lesser extent of black females, converged to that of white males in the 1980's across education groups. At the same time, the economic position of more-educated black males appears to have worsened relative to their white male counterparts. Fourth, there has been a sizable college-enrollment response to the rising relative wages of college graduates. This response suggests that education-earnings differentials may stop increasing, or even start to decline, in the near future.

Blanchard, Olivier Jean

PD August 1991. **TI** How to Privatise. **AU** Blanchard, Olivier Jean; Layard, Richard. **AA** Blanchard: Massachusetts Institute of Technology. Layard: London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 50; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 30. **PR** no charge. **JE** P31, P23, L33, P52, O11. **KW** Privatization. Housing. Economic Development. Socialism. Economic Reform. Market Transformation.

AB Three main criteria should govern a privatization plan: speed, fairness, and efficient control. From this we derive our optimum scheme, though we recognize that in most countries it needs modifying to existing circumstances. 1. Privatization should be by gift, not sale. But distribution by gift does not require distribution through vouchers. 2. To ensure efficient control of restructuring, there should be holding companies, each being the chief owner of enterprises drawn from a range of industries. Citizens should be given shares in each holding company. The holding company should be charged to restructure its enterprises and then sell all (or at least 50 per cent) of its shares within a 10-year period. The final pattern of owners would include citizens, workers, foreigners, and pension funds, but provisions would be made for some "stable core" of owners - either interlocking ownership among firms, or major holdings by foreigners, banks or holding companies. 3. For smaller companies a different approach would suffice, involving direct sale or leasing. 4. If mass unemployment it to be avoided, it is crucial to create a mass market in housing. The only way do do this quickly is to give all houses to their existing tenants.

TI The Debt Burden and Debt Maturity. **AU** Missale, Alessandro; Blanchard, Olivier Jean.

PD February 1992. **TI** Dynamic Efficiency, The Riskless Rate, and Debt Ponzi Games under Uncertainty. **AU** Blanchard, Olivier Jean; Weil, Philippe. **AA** Blanchard: Massachusetts Institute of Technology and National Bureau of Economic Research. Weil: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3992; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** H63, E62, D91. **KW** Government Debt. Uncertainty. Debt Financing. Public Debt.

AB Can governments roll their debt over forever in dynamically efficient economies, and thus avoid the need to raise taxes? While the answer is a clear no under certainty, it depends, under uncertainty, on whether public debt provides intergenerational insurance. When it does not, roll over is not possible, even if the rate of return on one-period bonds is below the growth rate. When it does, debt roll over may be possible, even if the return on one-period bonds is above the growth rate.

PD February 1992. **TI** The Flow Approach to Labor Markets. **AU** Blanchard, Olivier Jean; Diamond, Peter. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4000; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E24, J21, J63, J64, J31. **KW** Job Creation. Wages. Matching Models. Unemployment. Wage Determination.

AB The "flow approach" to labor markets builds up from the flows of workers and of jobs. It is based on three essential components, a specification of labor demand in terms of flows of job creation/destruction, a process of matching between workers and firms, and a process of wage determination where wages depend on the labor market prospects of employed workers and firms. We think that this approach gives the right basic picture of unemployment and unemployment dynamics, and of the relation between wage movements and the state of the labor market. The additional richness it naturally delivers also captures the important implications of labor market mechanisms for macroeconomics. Finally, its structure is realistic enough to allow for a productive interaction with, and use of, micro-work and micro-evidence in both labor and product markets. This paper shows the structure of the approach and some of its implications.

Blanchflower, David G.

PD October 1991. **TI** What Makes an Entrepreneur? **AU** Blanchflower, David G.; Oswald, Andrew. **AA** Blanchflower: National Bureau of Economic Research and Dartmouth College. Oswald: London School of Economics and University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 125; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL, ENGLAND. **PG** 22. **PR** 1 pound. **JE** M13. **KW** Entrepreneurs. Liquidity Constraints.

AB This paper studies the factors which shape entrepreneurship. It uses (i) direct survey and (ii) econometric evidence from Great Britain to argue that capital constraints appear to play a significant role. The paper develops a model in which this can be explained by the existence of asymmetric information between entrepreneurs and bankers. The econometric estimates suggest that the probability of self-employment depends sensitively upon whether the individual ever received a gift or inheritance.

PD November 1991. **TI** A Longitudinal Analysis of Young Entrepreneurs in Australia and the United States. **AU** Blanchflower, David G.; Meyer, Bruce D. **AA** Blanchflower: Dartmouth College, National Bureau of Economic Research, and London School of Economics. Meyer: Northwestern University and National Bureau of Economic Research. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 55; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 43. **PR** no charge. **JE** J21, J23. **KW** Entrepreneurs. Self-Employment.

AB This paper examines the pattern of self-employment in Australia and the United States. We particularly focus on the movement of young people in and out of self-employment using comparable longitudinal data from the two countries. We find that the forces that influence whether a person becomes self-employed are broadly similar: in both countries skilled manual workers, males and older workers were particularly likely to move to self-employment. We also find that previous firm size, previous union status and previous earnings are important determinants of transitions to self-employment. The main difference we observe is that additional years of schooling had a positive impact on the probability of being self-employed in the U.S. but were not a significant influence in Australia. However, the factors influencing the probability of leaving self-employment are different across the two countries. The only similarity is that in both countries younger individuals are more likely to leave.

Blank, Rebecca M.

PD October 1991. **TI** Why were Poverty Rates so High in the 1980s? **AA** Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3878; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** $3.00. **JE** E24, I32, E31, D12, D31. **KW** Employment. Wages. Income Distribution. Poverty. Public Assistance. Welfare Programs.

AB This paper explores the relationship between the macroeconomy and the poverty rate. The first section provides evidence that poverty was far less responsive to macroeconomic growth in the 1980's than it had been in earlier decades. The section explores and rejects four reasons for this: It is not due to the exclusion of in-kind income from the data, to the regional location of the poor, to the public assistance changes of the early 1980's or to the changing demographic composition of the poor. Instead, it is almost entirely due to declines in real wages that occur among low-wage workers over the 1980's. In fact, employment and weeks of work per year within low-income households expands more rapidly in the 1980's than in the 1960's. This is almost entirely offset, however, by declines in weekly earnings at the bottom of the income distribution. The result is that economic growth has been a far less effective anti- poverty tool over the past decade.

Bloom, David E.

TI Changes in Earnings Differentials in the 1980's: Concordance, Convergence, Causes, and Consequences. **AU** Blackburn, McKinley L.; Bloom, David E.; Freeman, Richard B.

PD January 1992. **TI** The Fall in Private Pension Coverage in the U.S. **AU** Bloom, David E.; Freeman, Richard B. **AA** Bloom: Columbia University and National Bureau of Economic Research. Freeman: Harvard University, London School of Economics and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3973; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J33, J38, G23, J32. **KW** Unions. Pensions. Retirement. Fringe Benefits.

AB This study documents the 1980's fall in pension coverage and shows that it was concentrated most heavily on men, especially on the young and less educated. We find evidence that changes in real earnings and deunionization account for a sizable portion of the fall in pension coverage. By contrast, we find little evidence that pension coverage fell because of a twist away from pensions in the trade-off between pensions and other forms of compensation. With the possible exception of changes in the tax deductibility of contributions to individual retirement accounts, we also find little evidence that pension coverage declined because of institutional changes that reduced the attractiveness of pensions to employees or employers.

Bloom, Erik A.

TI Agricultural Research Productivity in Pakistan. **AU** Azam, Qazi Tauqir; Bloom, Erik A.; Evenson, Robert E.

Blundell, Richard

PD March 1990. **TI** The Information Content of Equivalence Scales. **AU** Blundell, Richard; Lewbel, Arthur. **AA** Blundell: University College London and Institute for Fiscal Studies. Lewbel: Brandeis University. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/4; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 32. **PR** 3 pounds. **JE** D11, D12. **KW** Demand System. Household. Cost Functions. Consumer Economics.

AB It is well-known that equivalence scales, defined as ratios of cost functions between demographically different households cannot be completely identified from demand data alone. This paper derives the exact components of equivalence scales that are identifiable. It is shown that demand equations alone provide no information about equivalence scales in any one price regime, but that if equivalence scales in any one price regime were known, then demand data can identify the unique true equivalence scales in all other price regimes. Sensible identifying interpretation of equivalence scales are discussed and some empirical tests and estimates from U.K. micro-data are provided.

Bodie, Zvi

PD January 1992. **TI** Labor Supply Flexibility and Portfolio Choice in a Life-Cycle Model. **AU** Bodie, Zvi; Merton, Robert C.; Samuelson, William F. **AA** Bodie and Samuelson: Boston University. Merton: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3954; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** D91, D11, D12. **KW** Consumption. Portfolio Choice. Life Cycle Model. Leisure.

AB This paper examines the effect of the labor-leisure choice on portfolio and consumption decisions over an individual's life cycle. The model incorporates the fact that individuals may have considerable flexibility in varying their work effort (including their choice of when to retire). Given this flexibility, the individual simultaneously determines optimal levels of current consumption, labor effort and an optimal financial investment strategy at each point in his life cycle. We show that labor and investment choices are intimately related. The ability to vary labor supply ex post induces the individual to assume greater risks in his investment portfolio ex ante. The model explains why the young (enjoying greater labor flexibility over their working lives) may take greater investment risks than the old. It also offers an explanation as to why consumption spending is relatively "smooth" despite volatility in asset prices. Finally, the paper provides a compact method for valuing the risky cash flows associated with future wage income.

Bofinger, Peter

PD November 1991. **TI** Options for a New Monetary Framework for the Area of the Soviet Union. **AA** Landeszentralbank in Baden-Wurttemberg. **SR** Centre for Economic Policy Research Discussion Paper: 604; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 20. **PR** 3 Pounds ($5.00). **JE** E42, E58, F33, F36. **KW** Foreign Exchange. Currency. Monetary Union. Soviet Union.

AB The paper discusses alternative options for a future monetary order in the area of the Soviet Union. Its main focus is on two questions: Under what conditions would a common rouble currency area be compatible with fiscal discipline and effective financial control over the large numbers of state-owned enterprises? If a transition to separate republican currencies is unavoidable, how can its effects on trade flows within the area of the Soviet Union be kept as small as possible? The paper analyzes four options for a monetary union: the relatively unspecified Draft Treaty proposal by Yavlinsky; a monetary union according to the outline of the European System of Central Banks; a monetary union according to the model of a currency board; and a common central bank system manged by representatives from international institutions. If a system of separate currencies is to be introduced, it is essential that all republics peg to the same outside anchor, preferably the ECU. A common fixed rate system between the republics as well as a multilateral payments union could contribute to a reduction of the need for aggregate foreign exchange.

Boldrin, Michele

PD May 1991. **TI** Indeterminacy of Equilibria in Models with Infinitely Lived Agents and External Effects. **AU** Boldrin, Michele; Rustichini, Aldo. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 955; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 26. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** O41, E22. **KW** Growth Model. Capital Accumulation. Indeterminate Equilibrium.

AB In this paper we study the indeterminacy of equilibria in infinite horizon capital accumulation models with a continuum of identical agents and external effects. The problem is addressed in a fairly general form and our investigation encompasses both models with bounded and unbounded accumulation paths. We study a one-sector and a two-sector version of the neoclassical growth model and discover that they behave differently. In fact, when the external effect is positive, equilibria converging to a steady state (or to a stationary growth rate) are locally unique for the one sector but not for the two sector economy. Indeterminacy arises in the one sector case only for cyclic or chaotic paths. We show, by means of an example, that they are possible if the external effect is strong enough. An example of indeterminate equilibria generated by a negative external effect is also provided. On the contrary it is simple to provide examples of two sector models where a positive external effect induces a two-dimensional manifold of equilibria converging to the same steady state. We also point out that the dynamic behavior of these (indeterminate) equilibria can be quite complicated and that persistent endogenous oscillations in the growth rate may arise in the case of unbounded accumulation.

PD June 1991. **TI** Threshold Externalities and Economic Development: A Note. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 953; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 8. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** O15, O16, J24. **KW** Capital Accumulation. Economic Development. Physical Capital. Human Capital.

AB In an interesting paper recently published, (Azariadis-Drazen [1990]), Costas Azariadis and Allan Drazen have put forth an OLG model of physical and human capital accumulation which seems appropriate for studying the role that education and the creation of human capital have in the process of economic development. In particular the two authors aim at explaining the "stylized fact" according to which certain underdeveloped countries appear stuck in a "poverty trap" where neither type of capital is accumulated and personal income stagnates in spite of the fact that they are in possession of the same technology that allows other countries to grow persistently. This note attempts to qualify the formal set-up adopted by A-D in order for the model to deliver the desired results.

Boltho, Andrea

PD October 1991. **TI** Why do Countries Change Their Fiscal Policies? Western Europe in the 1980's. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 119; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL, ENGLAND. **PG** 25. **PR** 1 pound. **JE** F15, E64, O52, H62. **KW** Fiscal Policy. Economic Integration. Devaluation. Budget Deficit. Europe.

AB This paper looks at why and how seven European countries (Belgium, Denmark, Ireland, Italy, the Netherlands, Spain and Sweden) which faced large fiscal deficits in the early 1980's attempted to correct the situation. Abrupt changes in policies usually took place following elections and under the pressure of both public sector and external deficits. Retrenchment was more successful in countries which devalued and used incomes policies to moderate inflation. In a future European Monetary Union external pressures on individual countries would disappear and devaluations would be ruled out. This could generate "irresponsible" fiscal behavior and demands for large transfers from richer to poorer members.

Bonin, John P.

TI Debt Service, Foreign Direct Investment and Transformation to Market: A Simple Model. **AU** Abel, Istvan; Bonin, John P.

TI The "Big Bang" Versus "Slow but Steady": A Comparison of the Hungarian and the Polish Transformations. **AU** Abel, Istvan; Bonin, John P.

Borenstein, Severin

PD July 1991. **TI** Competition and Price Dispersion in the U.S. Airline Industry. **AU** Borenstein, Severin; Rose, Nancy L. **AA** Borenstein: University of California, Davis. Rose: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3785; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** L93, L13, D43. **KW** Airlines. Transportation. Pricing. Monopolistic Competition. Oligopoly.

AB This paper analyzes dispersion in the prices that an airline charges to different customers on the same route. Such variation in airlines fares is substantial: the expected absolute difference in fares between two of an airline's passengers on a route averages thirty-six percent of the airline's average ticket price on the route. The pattern of price dispersion that we find does not seem to be explained solely by cost differences. Dispersion is higher on more competitive routes possibly reflecting a pattern of discrimination against customers who are

https://doi.org/10.1017/S0951007900002576 Published online by Cambridge University Press

less willing to switch to alternative flights or airlines. We argue that the data support an explanation based on theories of price discrimination in monopolistically competitive industries.

Borjas, George J.

PD June 1991. **TI** On the Labor Market Effects of Immigration and Trade. **AU** Borjas, George J.; Freeman, Richard B.; Katz, Lawrence F. **AA** Borjas: University of California, San Diego. Freeman and Katz: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3761; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J31, J24, F22, F32. **KW** Wage Structure. Immigration. Trade Deficit. Wage Differentials. Human Capital.
AB In the 1980's, the wages and employment rates of less-skilled Americans fell relative to those of more-skilled workers. This paper examines the contribution of the continuing inflow of less-skilled immigrants and the increasing importance of imports in the U.S. economy to these trends. Our empirical evidence indicates that both trade and immigration augmented the nation's supply of less-skilled workers, particularly workers with less than a high school education. By 1988, trade and immigration increased the effective supply of high school dropouts by 28 percent for men and 31 percent for women. We estimate that from thirty to fifty percent of the approximately 10 percentage point decline in the relative weekly wage of high school dropouts between 1980 and 1988 can be attributed to the trade and immigration flows. In addition, our analysis suggests that from 15 to 25 percent of the 11 percentage point rise in the earnings of college graduates relative to high school graduates from 1980 to 1985 can be attributed to the massive increase in the trade deficit over the same period, but that the effects of trade on the college/high school wage differential diminished with improvements in the trade balance during the late 1980's.

PD July 1991. **TI** Ethnic Capital and Intergenerational Mobility. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3788; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J24, J15. **KW** Human Capital, Intergenerational Model. Minorities.
AB This paper analyzes the extent to which ethnic skill differentials are transmitted across generations. I assume that ethnicity acts as an externality in the human capital accumulation process. The skills of the next generation depend on parental inputs and on the quality of the ethnic environment in which parents make their investments, or "ethnic capital." The empirical evidence reveals that the skills of today's generation depend not only on the skills of their parents, but also on the average skills of the ethnic group in the parent's generation.

PD July 1991. **TI** Ethnic Capital and Intergenerational Mobility. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3788; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 29. **PR** $3.00. **JE** J24, J62. **KW** Human Capital. Skill Differentials. Intergenerational Transmission. Ethnicity.
AB This paper analyzes the extent to which ethnic skill differentials are transmitted across generations. I assume that ethnicity acts as an externality in the human capital accumulation process. The skills of the next generation depend on parental inputs and on the quality of the ethnic environment in which parents make their investments, or "ethnic capital." The empirical evidence reveals that the skills of today's generation depend not only on the skills of their parents, but also on the average skills of the ethnic group in the parent's generation.

PD January 1992. **TI** The Intergenerational Mobility of Immigrants. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3972; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J62, F22, J61, J68, J31. **KW** Migration. Immigration Policy. Intergenerational Mobility. Ethnic Groups. Immigrants. Wages.
AB This paper analyzes the intergenerational mobility of immigrants. Using the 1940-1970 Censuses, the study reveals an important link between the earnings of immigrants and the earnings of their American-born children. Although there is some regression towards the mean, the earnings of second-generation Americans are strongly affected by variables describing economic conditions in the source countries of their parents. Current immigration policy, therefore, determines not only how immigrants perform in the labor market, but also determines tomorrow's differences in the labor market experiences of American-born ethnic groups.

PD February 1992. **TI** Self-Selection and Internal Migration in the United States. **AU** Borjas, George J.; Bronars, Stephen G.; Trejo, Stephen J. **AA** Borjas: University of California, San Diego and National Bureau of Economic Research. Bronars and Trejo: University of California, Santa Barbara. **SR** National Bureau of Economic Research Working Paper: 4002; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J31, J61, J41, J21. **KW** Wages. Migration. Wage Differentials. Labor Mobility. Skill Differentials.
AB Within the conceptual framework of the Roy model, this paper provides an empirical analysis of internal migration flows using data from the National Longitudinal Surveys of Youth. The theoretical approach highlights regional differences in the returns to skills: regions that pay a higher return to skills attract more skilled workers than regions that pay lower returns. Our empirical results suggest that interstate differences in the returns to skills are a major determinant of both the size and skill composition of internal migration flows. Persons whose skills are most mismatched with the reward structure offered by their current state of residence are the persons most likely to leave that state, and these persons tend to relocate in states which offer higher rewards for their particular skills.

Brainard, S. Lael

PD July 1991. **TI** Protecting Losers: Optimal Diversification, Insurance, and Trade Policy. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3773; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F22, F13,

F12, F21. **KW** Trade Policy. Human Capital. International Investment.
AB This paper derives a portfolio diversification rationale for a trade policy regime that insures returns to nondiversifiable human capital investment. In the absence of complete insurance markets for human capital, the decentralized equilibrium is characterized by excessive specialization. The socially optimal investment portfolio entails diversification for the reasons familiar from the CAPM. By credibly promising to protect losers ex post, the government can achieve the optimally diversified investment pattern. In contrast to previous results, two instruments are sufficient to achieve both efficient reallocation and full insurance when human capital is mobile at some cost, due to the endogeneity of the initial investment decision.

PD January 1992. **TI** Sectoral Shifts and Unemployment in Interwar Britain. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3980; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E24, N14, E32. **KW** Unemployment. Demand Shocks. Excess Returns. Stock Market.
AB This paper measure the importance of sectoral shifts, as against aggregate shocks and changes in search intensity, in explaining the persistent high unemployment that prevailed in interwar Britain. It develops a new measure of sectoral shifts that captures the arrival of information about reallocation shocks by using the cross-section variation in sectoral stock market excess returns over time. The cross-section variation series accounts for roughly one-quarter of the average level of aggregate unemployment during the interwar period, even after controlling for a variety of shocks to aggregate demand, and for roughly one-half of the variation in unemployment, suggesting an important role for sectoral shifts.

Branson, William H.
PD October 1991. **TI** Exchange Rate Policies for the EFTA Countries in the 1990's. **AA** Princeton University. **SR** Centre for Economic Policy Research Discussion Paper: 586; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 27. **PR** 3 pounds ($5.00). **JE** F31, F33, F41, F21. **KW** Exchange Rate. Capital Mobility. Monetary Policy. European Monetary System.
AB As the European Community unifies its financial markets and fixes it exchange rates, the EFTA countries are liberalizing capital movements to the same extent. The EFTA countries thus face a decision on financial markets and exchange rate policy: should they essentially join the European Monetary System (EMS) or should they maintain independent currencies with alternative exchange rate policies? This paper begins by assuming that the EFTA countries align themselves with the EMS and join the unified European financial markets. We then review the constraints this decision would place on current account financing and on monetary policy. Then we question the assumption by introducing three alternatives: an active exchange rate policy that aims at price level stability, an alternative basket to the European Currency Unit for a fixed peg, and gradual adjustment of the real exchange rate against the basket. We conclude that all three would be inferior to EMS membership.

Braun, Philip
TI Twenty-Two Years of the NBER-ASA Quarterly Economic Outlook Surveys: Aspects and Comparisons of Forecasting Performance. **AU** Zarnowitz, Victor; Braun, Philip.

Brekk, Odd Per
TI Assessing the Impact of Structural Adjustment on the Poor: The Case of Malawi. **AU** Hicks, Ronald; Brekk, Odd Per.

Broadie, Mark
PD December 1991. **TI** Quality and Timing Options in Treasury Futures Markets -- Theory and Evidence. **AU** Broadie, Mark; Sundaresan, Suresh. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-26; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 22. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** G13, G14. **KW** Options. Futures Pricing. Securities. Bond Market.
AB Some financial contracts provide investors with timing and quality options. An investor who has an open short position in Treasury Bond (Treasury Note) futures contracts during the delivery month has the flexibility of delivering one or more of T-Bonds (T-Notes) from a set of deliverable securities. This is referred to as the "quality" option. In addition, the "short" has the option to determine the timing of delivery within the rules specified by the contract. Using delivery data from 1977 to 1991 we provide some empirical evidence on actual delivery strategies. We find that when the yield curve is inverted, more deliveries tend to occur in earlier parts of delivery month. On the other hand, when the yield curve is normal, most of the deliveries are delayed until the very end of the month. Based on a general arbitrage-free interest rate model, a computational procedure is developed for determining the equilibrium futures price that will prevail at all times that the contract trades. Concurrently, the optimal delivery policy for the holder of a short futures position is determined. This is the first arbitrage-free pricing procedure for Treasury futures contracts that incorporates all of the timing and quality options, including the "wild card" feature and the end-of-the-month option. Using the Cox, Ingersoll and Ross (1985) model as an illustrative example, we characterize optimal delivery strategies and their impact on the equilibrium futures price. We provide examples which produce discounts in futures prices that are consistent with the empirical evidence.

Bronars, Stephen G.
TI Self-Selection and Internal Migration in the United States. **AU** Borjas, George J.; Bronars, Stephen G.; Trejo, Stephen J.

Bruno, Michael
PD October 1991. **TI** From Sharp Stabilization to Growth: On the Political Economy of Israel's Transition. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3881; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $3.00. **JE** E63, E58, E52, O53. **KW** Stabilization Policy. Central Bank. Exchange Rate. Monetary Policy.

https://doi.org/10.1017/S0951007900002576 Published online by Cambridge University Press

AB The paper considers the interplay of the design and execution of stabilization policy and structural reform with the role of various agents and pressure groups in a democracy. The context is the political economy of Israel's transition from a successful stabilization to a renewed growth process whose sustainability is yet to be attained. Particular emphasis is put on the role of Central Bank independence, the fight over the budget and over the role of the exchange rate in the aftermath of a sharp stabilization, and the process of financial and capital market reform. The analysis was done from the point of view and temporary role of an academic as a policy-maker, in this case as the Governor of the Central Bank and Senior Advisor to the government.

Buiter, Willem H.

PD March 1990. **TI** Fiscal Policy Interdependence and Efficiency. **AU** Buiter, Willem H.; Kletzer, Kenneth M. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 611; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 50. **PR** $2.00 + postage. **JE** F41, E62, H21. **KW** Fiscal Policy. Externality. Open Economy.
AB This paper uses a two-country overlapping generations model to study the international transmission of fiscal policy among open interdependent economies under free international capital mobility. With only lump-sum taxes and transfers, international transmission involves only pecuniary externalities: barring dynamic inefficiency, only distributional issues (intergenerational and international) are involved. With age-specific taxes and transfers, the ability to run deficits and issue debt does not enhance the choice set of the governments. Source-based taxes on the rentals from capital and residence-based taxes on all property income are also studied.

PD March 1990. **TI** The Welfare Economics of Cooperative and Noncooperative Fiscal Policy. **AU** Buiter, Willem H.; Kletzer, Kenneth M. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 612; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 50. **PR** $2.00 + postage. **JE** E62, F41, F42. **KW** Policy Coordination. Fiscal Policy. Social Welfare.
AB In a competitive two-country overlapping generations model with perfect capital mobility, a plan that is individually Pareto optimal (that is Pareto optimal with respect to individual preferences) can be sustained without coordination of national fiscal policies when the fiscal arsenal is restricted to lump-sum taxes and government borrowing. Cooperation is required to achieve a Pareto optimum with respect to the two utilitarian national social welfare functions. Cooperation and international side payments are required to achieve an optimum with respect to a utilitarian global social welfare function.

PD April 1990. **TI** Reflections on the Fiscal Implications of a Common Currency. **AU** Buiter, Willem H.; Kletzer, Kenneth M. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 613; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 33. **PR** $2.00 + postage. **JE** F33, F36, E62, F31. **KW** Monetary Union. Policy Coordination. Externality. Fiscal Policy. Europe.
AB This paper studies the likely consequences of monetary unification among the EC members for the conduct of fiscal policy in the EC countries (and by an emerging Federal European Fiscal Authority). Among the conclusions are the following. If the Eurofed is to be independent, the external exchange rate policy of the EC should be assigned to the Eurofed and not to the fiscal authorities. Effective (as opposed to formal) independence of the Eurofed is going to be very difficult to achieve. Coordinated upper ceilings on national public sector financial deficits are unnecessary and probably undesirable. Coordination of national public expenditure policies, tax policies and borrowing policies is in principle desirable for both efficiency and distributional reasons. The empirical models required for a serious welfare analysis of fiscal policy coordination do not yet exist.

PD September 1991. **TI** Saving and Endogenous Growth: A Survey of Theory and Policy. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 642; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 58. **PR** $2.00 + postage. **JE** E62, H31, O41. **KW** Fiscal Policy. Economic Growth. Growth Model. Savings.
AB The paper surveys and extends recent results on the effect of changes in.

PD December 1991. **TI** Saving and Endogenous Growth: A Survey of Theory and Policy. **AA** Yale University. **SR** Centre for Economic Policy Research Discussion Paper: 606; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 40. **PR** 3 Pounds ($5.00). **JE** D91, E21, E62, H62. **KW** Savings. Economic Growth. Fiscal Policy. Deficit Spending.
AB The paper surveys and extends recent results on the effect of changes n government fiscal and financial policy, and in private savings behavior n economic growth. Private saving behavior is represented by an overlapping enerations model. The supply side of the model permits endogenous rowth through aggregate constant returns to an augmentable input. Private ector behavior is parameterized with the time preference rate, the ntertemporal elasticity of substitution, the birth rate, the death rate nd the rate at which labor productivity declines with age. Fiscal nstruments include public consumption spending, the capital income tax ate, deficit financing and balanced-budget intergenerational redistribution an unfunded social security retirement scheme).

Bulow, Jeremy

PD October 1991. **TI** Rational Frenzies and Crashes. **AU** Bulow, Jeremy; Klemperer, Paul. **AA** Bulow: Stanford University. Klemperer: St Catherine's College, Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 593; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 18. **PR** 3 Pounds ($5.00). **JE** D44, D11, D83. **KW** Prices. Auctions. Demand Curve. Information.
AB Most markets clear through a sequence of sales rather than through a Walrasian auctioneer. Because buyers can decide whether to buy now or later, rather than only now or never, their current "willingness to pay" is much more sensitive to price than is the demand curve. In consequence, markets will be extremely sensitive to new information, leading to frenzies where demand feeds upon itself, and crashes where price drops discontinuously. Although no buyer's independent reservation value reveals much about overall demand, a small increase in one such value can cause a large increase or decrease in average price.

Burda, Michael

PD December 1991. **TI** Human Capital, Investment and Migration in an Integrated Europe. **AU** Burda, Michael; Wyplosz, Charles. **AA** INSEAD. **SR** Centre for Economic Policy Research Discussion Paper: 614; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 9. **PR** 3 Pounds ($5.00). **JE** F22, J61, O52, O15. **KW** Migration. Europe. Labor Mobility.

AB The short and long-term regional consequences of migration for European aggregate supply are examined in a simple model in which human capital enters the production function externally. The planner chooses a reallocation of population across East and West that cannot be replicated by the market without taxes or subsidies. The market solution in this model with free migration is always associated with an efficiency loss and might lead to the "Mezzogiorno syndrome" in the East.

PD December 1991. **TI** Labour Mobility and German Integration: Some Vignettes. **AU** Burda, Michael; Wyplosz, Charles. **AA** INSEAD. **SR** Centre for Economic Policy Research Discussion Paper: 615; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 24. **PR** 3 Pounds ($5.00). **JE** F15, J61, O52. **KW** Economic Integration. Labor Mobility. Germany.

AB Several alternative scenarios for the economic integration of East and West Germany are analyzed. The roles of migration and labor mobility in this process are given particular attention. The effects of congestion costs, rigid wages, human capital, heterogeneity of migrants and endogenous growth type externalities are studied in a series of simple models. The common thread is that there may be scope for interventionist policies, which need not necessarily involve subsidies to employment.

Busch, Lutz-Alexander

PD September 1991. **TI** Perfect Equilibria in a Negotiation Model. **AU** Busch, Lutz-Alexander; Wen, Quan. **AA** Busch: University of Western Ontario. Wen: University of Windsor. **SR** University of Western Ontario Department of Economics Research Report: 9108; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 43. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** C78, C71, D74. **KW** Bargaining. Negotiations. Repeated Games.

AB In standard bargaining models the disagreement payoff is exogenous and history independent. Here a model of negotiations is proposed which makes the disagreement payoff in every period the outcome of a normal form stage game. The model thereby allows for an analysis of the role played by strategic behavior during periods in which no agreement has been achieved, especially as this behavior relates to the form of the negotiated outcome. The paper characterizes players' worst equilibrium payoffs in terms of the structure of payoffs in the state game. The set of subgame perfect equilibria of the model is characterized in terms of these worst equilibrium payoffs. Quite generally, many feasible outcomes of the negotiation game can be sustained as subgame perfect equilibria. In particular, many Pareto inefficient outcomes are sustainable even in the presence of complete information and full rationality.

Caballero, Ricardo J.

PD October 1991. **TI** Some Evidence of Productivity Linkages in Manufacturing. **AU** Caballero, Ricardo J.; Lyons, Richard K. **AA** Caballero: Columbia University. Lyons: Columbia University and National Bureau of Economic Research. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-27; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 17. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** E23, L60, O14, D61, D62. **KW** Externalities. Manufacturing. Industrialization.

AB This paper reviews some of our previous results on external economies in manufacturing and reconsiders them in the context of the deindustrialization debate. Since externalities involve a wedge between private and social marginal costs/benefits they constitute a market failure. And, since some form of market failure is necessary to justify a policy to fight deindustrialization, our evidence for external economies is potentially relevant. The external economies we find are operative between a number of different aggregation levels over both the short and long-run. Though we are not yet at a point where we can identify the precise source(s) of the effects, we conclude that they provide some new support for traditional "linkage" arguments against deindustrialization.

PD December 1991. **TI** The Cleansing Effect of Recessions. **AU** Caballero, Ricardo J.; Hammour, Mohamad L. **AA** Columbia University. **SR** National Bureau of Economic Research Working Paper: 3922; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** $3.00. **JE** E32, J63, E23, E24, O32. **KW** Business Cycle. Technological Change. Employment. Recessions. Productivity.

AB This paper investigates the response of industries to cyclical variations in demand in the context of a vintage model of "creative destruction." Due to process and product innovation, production units that embody the newest techniques are continuously being created, and outdated units are being destroyed. We investigate the extent to which changes in demand are accommodated on the creation or destruction margins. Although outdated production units are the most likely to turn unprofitable and be scrapped in a recession, they can be "insulated" from the fall in demand if it is accompanied by a reduction in the creation rate. The model's implications are broadly consistent with observed variations in manufacturing gross job flows. The calibrated model matches the relative volatilities of job creation and destruction, and their asymmetries over the cycle.

Calvo, Guillermo A.

PD July 1991. **TI** Obstacles to Transforming Centrally-Planned Economies: The Role of Capital Markets. **AU** Calvo, Guillermo A.; Frenkel, Jacob A. **AA** International Monetary Fund. **SR** National Bureau of Economic Research Working Paper: 3776; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** P52, P22, P23, P21. **KW** Market Economy. Economic Reform. Europe. Credit Markets.

AB This paper identifies obstacles hindering the transformation of centrally-planned economies (CPEs) into well-functioning market economies. The analysis is motivated by the recent experience with economic transformation and restructuring in Eastern Europe and the U.S.S.R. The economic system in CPEs is highly distorted. Prices do not represent real social costs, incentives systems are absent, losses of unprofitable state-owned enterprises are automatically financed, legislations vital for the functioning of markets are not in place, private ownership and property rights are underdeveloped, bankruptcy laws are absent, markets are missing, shortages prevail and, occasionally, inflation is high. The obstacles identified relate to (i) anticipatory dynamics, (ii) monetary overhang and the budget, and (iii) underdeveloped credit markets. It is demonstrated that these obstacles inhibit the effectiveness of price reform, monetary and credit policies, and trade liberalization.

Campbell, John Y.

PD April 1991. **TI** Pitfalls and Opportunities: What Macroeconomists Should Know about Unit Roots. **AU** Campbell, John Y.; Perron, Pierre. **AA** Princeton University. **SR** National Bureau of Economic Technical Working Paper: 100; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E13, E20, C51, C52. **KW** Unit Roots. Macroeconomics. Cointegration.
AB This paper is an introduction to unit root econometrics as applied in macroeconomics. The paper first discusses univariate time series analysis, emphasizing the following topics: alternative representations of unit root tests, and the interpretation of unit root econometrics in finite samples. A second part of the paper tackles similar issues in a multivariate context where cointegration is now the central concept. The paper reviews representation, testing, and estimation of multivariate time series models with some unit roots. Two important themes of this paper are first, the importance of correctly specifying deterministic components of the series; and second, the usefulness of unit root tests not as methods to uncover some "true relation" but as practical devices that can be used to impose reasonable restrictions on the data and to suggest what asymptotic distribution theory gives the best approximation to the finite sample distribution of coefficient estimates and test statistics.

PD November 1991. **TI** Where do Betas Come From? Asset Price Dynamics and the Source of Systematic Risk. **AU** Campbell, John Y.; Mei, Jianping. **AA** Campbell: Princeton University. Mei: New York University. **SR** New York University Salomon Brothers Center Working Paper: S-91-52; Salomon Brothers Center for the Study of Financial Institutes, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 16. **PR** $5.00. **JE** G12. **KW** Asset Returns. Asset Pricing.
AB Researchers in finance have traditionally explained differing mean asset returns by asset's betas, that is, the sensitivities of their returns to underlying sources of risk. Betas themselves have been left unexplained. This paper uses an approximate log-linear present value model, relating unexpected returns to news about future cash flows and returns, to show how betas are determined in various alternative asset pricing models.

PD February 1992. **TI** Intertemporal Asset Pricing without Consumption Data. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3989; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G12, D91, E44. **KW** Asset Pricing. Risk Premia. Consumption.
AB This paper proposes a new way to generalize the insights of static asset pricing theory to a multi-period setting. The paper uses a log linear approximation to the budget constraint to substitute out consumption from a standard intertemporal asset pricing model. In a homoskedastic log normal setting, the consumption-wealth ratio is shown to depend on the elasticity of intertemporal substitution in consumption, while asset risk premia are determined by the coefficient of relative risk aversion. Risk premia are related to the covariances of asset returns with the market return and with news about the discounted value of all future market returns.

Carlino, Gerald

PD 1991. **TI** Have Regional Per-Capita Incomes Converged? **AU** Carlino, Gerald; Mills, Leonard. **AA** Carlino: Federal Reserve Bank of Philadelphia and University of Pennsylvania. Mills: Federal National Mortgage Association. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 91-18; 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 payable to Federal Reserve Bank of Philadelphia. **JE** O41, O47, O51, O15. **KW** Endogenous Growth. Neoclassical Model. Income Distribution. Growth Model.
AB A main tenant of Solow's (1956) neoclassical growth model is that poor countries should tend to catch up to rich ones through time, implying that per-capita incomes converge in level (beta-convergence). Recently economists have taken exception to the Solow model and argue that growth is endogenous, occurring through increasing returns to physical capital (Romer, 1986) or externalities associated with human capital complementaries (Lucas, 1988). In this paper, we attempt to combine cross-sectional and time series evidence on convergence by developing a dynamic version of the Baumol (1986) approach. This is done by considering the time series properties of per-capita income and earnings in each of the eight BEA regions of the U.S. relative to per-capita income and earnings in the nation during the 1929-87 time period. For convergence, shocks to relative regional per-capita incomes and earnings should be temporary (stochastic convergence) and regions having per-capita incomes and earnings above the national average in 1929 should exhibit slower than national average growth and vice versa during the 1929-87 period (cross-sectional or beta-convergence). We find evidence for stochastic convergence if we allow for a break in deterministic trend growth of relative regional incomes in 1946.

Carlton, Dennis W.

PD July 1991. **TI** The Theory of Allocation and its Implications for Marketing and Industrial Structure. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3786; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** D45, D43, D41, L14. **KW** Rationing. Pricing. Market Structure.
AB This paper identifies a cost of using the price system and

from that develops a general theory of allocation. The theory explains why a buyer's stochastic purchasing behavior matters to a seller. This leads to a theory of optimal customer mix much akin to the theory of optimal portfolio composition. It is the job of a firm's marketing department to put together this optimal customer mix. A dynamic pattern of pricing related to Ramsey pricing emerges as the efficient pricing structure. Price no longer equals marginal cost and is no longer the sole mechanism used to allocate goods. It is optimal for long-term relationships to emerge between buyers to ration goods during periods when demand is high. This rationing can take the form of refusing to sell to new customers and putting established customers on quotas. The evidence shows that this form of rationing, though foreign to the thinking of most economists, characterizes several industries. The theory provides an important incentive for a firm to exist, namely to facilitate trade amongst its customers.

PD July 1991. **TI** The Theory of Allocation and its Implications for Marketing and Industrial Structure. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3786; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 52. **PR** $3.00. **JE** D21, D45, M31. **KW** Marketing. Consumer Discrimination. Rationing. Quotas. Pricing.

AB This paper identifies a cost of using the price system and from that develops a general theory of allocation. The theory explains why a buyer's stochastic purchasing behavior matters to a seller. This leads to a theory of optimal customer mix much akin to the theory of optimal portfolio composition. It is the job of a firm's marketing department to put together this optimal customer mix. A dynamic pattern of pricing related to Ramsey pricing emerges as the efficient pricing structure. Price no longer equals marginal cost and is no longer the sole mechanism used to allocate goods. It is optimal for long-term relationships to emerge between buyers and sellers and for sellers to use their knowledge about buyers to ration goods during periods when demand is high. This rationing can take the form of refusing to sell to new customers and putting established customers on quotas. The evidence shows this form of rationing, though foreign to the thinking of most economists, characterizes several industries. The theory provides an important incentive for a firm to exist, namely to facilitate trade amongst its customers. The theory also provides a convincing explanation for the hostility that new futures markets face from established firms in the industry and shows that several practices, like price differences amongst consumers and swapping product with rivals, can be the result of competition and not market power.

Casella, Alessandra

PD October 1991. **TI** Voting on the Adoption of a Common Currency. **AA** University of California, Berkeley. **SR** Centre for Economic Policy Research Discussion Paper: 595; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 3 Pounds ($5.00). **JE** F15, F33. **KW** Currency. Monetary Policy. Monetary Union. Economic Integration.

AB Two countries adopting a common currency share the same monetary policy and save on transaction costs. This paper studies the impact of these two factors on the composition of markets. The establishment of a monetary union alters the boundaries between domestic and international markets and triggers distributional effects, creating disagreement among citizens over the desirability of the union. The outcome of a referendum on the choice between national currencies and monetary union depends on the country's level of development, suggesting that a common currency will be favored by a majority of traders in both countries only at a particular stage.

PD November 1991. **TI** Halting Inflation in Italy and France after World War II. **AU** Casella, Alessandra; Eichengreen, Barry. **AA** University of California, Berkeley. **SR** Centre for Economic Policy Research Discussion Paper: 594; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 30. **PR** 3 pounds ($5.00). **JE** E63, E65, F41, N14. **KW** Inflation. Stabilization Policy. Italy. France. Marshall Plan.

AB In the aftermath of World War II, Italy and France experienced high inflation. The two countries enacted remarkably similar economic policy measures, but stabilization came at different times: for Italy at the end of 1947, and for France a year later. Traditional explanations for the restoration of price stability cannot account for the difference in timing. In this paper, we use this international comparison to shed light on the nature of the inflationary process and on the cause of its decline. We conclude that inflation was symptomatic of an unresolved distributional conflict, and came to an end when one political group, in both countries the Left, accepted its defeat. The Marshall Plan helped to bring the stabilization about by reducing the costs to the group offering concessions. We argue that the French delay can be attributed to differences in the political climate and to the ambitious program of public investment.

Celentani, Marco

PD November 1991. **TI** Reputation with Deterministic Stage Games. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 636S; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 17. **PR** $2.50; checks payable to U.C. Regents. **JE** L14, C71, C70. **KW** Nash Equilibrium. Game Theory. Repeated Games.

AB A single long-run player plays a fixed stage game (simultaneous or sequential move) against an infinite sequence of short-run opponents that play only once but can observe all the past realized actions. Assuming that the probability distributions over types of long-run and short-run players have full support, we compute a lower bound on the Nash equilibrium payoffs to the long-run player.

Chadha, Bankim

PD October 1991. **TI** Models of Inflation and the Costs of Disinflation. **AU** Chadha, Bankim; Masson, Paul R.; Meredith, Guy. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/97; International Monetary Fund, Washington, DC 20431. **PG** 28. **PR** not available. **JE** E31, E52, E42. **KW** Inflation. Monetary Policy. Exchange Rate.

AB This paper focuses on the output costs of disinflation. A model of inflation with both forward and backward elements seems to characterize reality. Such an inflation model is estimated using data for industrial countries, and the output costs of a disinflation path are calculated, first analytically in a simple theoretical model, then by simulation of a global, multi-region empirical model. The credibility of a preannounced path for money consistent with the lowest output loss is considered. An alternative, more credible policy may be to announce an exchange rate peg to a low inflation currency.

Chah, Eun Young

PD November 1991. **TI** Liquidity Constraints and Intertemporal Consumer Optimization: Theory and Evidence from Durable Goods. **AU** Chah, Eun Young; Ramey, Valerie; Starr, Ross M. **AA** Young: Mapogu SEOUL. Ramey and Starr: University of California, San Diego. **SR** National Bureau of Economic Research Working Paper: 3907; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** $3.00. **JE** E21, D91. **KW** Consumption. Liquidity Constraints. Durable Goods. Cointegration.

AB This paper develops and tests a new set of stochastic implications of optimal consumption behavior in the presence of borrowing constraints. In a departure from previous models, the theory shows that liquidity constraints imply a distinctive intertemporal relationship between durable and nondurable goods consumption. The presence of binding, liquidity constraints are manifested as part of an error correction term from the long-run cointegrating relationship between durables and nondurables. When liquidity constraints are binding, the error correction term will have predictive power for the future change in nondurable consumption. Empirical tests of the implications using aggregate data support the hypothesis that liquidity constraints, rather than rule-of-thumb behavior, best explain the excess sensitivity of consumption to predictable changes in income.

Champ, Bruce

PD September 1991. **TI** Currency Elasticity and Banking Panics: Theory and Evidence. **AU** Champ, Bruce; Smith, Bruce D.; Williamson, Stephen D. **AA** Champ and Williamson: University of Western Ontario. Smith: Cornell University. **SR** University of Western Ontario Department of Economics Research Report: 9109; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 52. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** G21, G28, H31, E41. **KW** Banking. Commercial Banks. Currency. Money Demand.

AB The original developments in Bryant (1980) and Diamond-Dybrig (1983) spawned a large literature on bank panics and suspensions of convertibility. This paper constructs a model of panics which attaches importance to monetary factors. We also attempt to capture some contemporary explanations of banking panics, in which seasonal variations in the demand for credit and liquidity play a role.

Chang, Howard F.

TI Bargaining and the Division of Value in Corporate Reorganization. **AU** Bebchuk, Lucian; Chang, Howard F.

Chen, Zhaohui

PD January 1992. **TI** Estimating Expected Exchange Rates under Target Zones. **AU** Chen, Zhaohui; Giovannini, Alberto. **AA** Columbia University. **SR** National Bureau of Economic Research Working Paper: 3955; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 16. **PR** $3.00. **JE** E47, E42, F31, E52. **KW** Exchange Rate. Monetary Policy. Monetary Regimes.

AB This paper develops a simple econometric procedure for estimating expected exchange rates under target zones. We employ the linear projection methodology to make predictions without relying on any prior structural or distributional assumptions, and at the same time demonstrate that such a methodology has to be modified in an important way to account for the presence of the fluctuation band. Our empirical results show that the band effect is nontrivial for narrow target zones such as the Bretton Woods system. We also develop a method to estimate the shapes of the unconditional distributions of exchange rates under target zones. The empirical results show that the unconditional distributions of exchange rates can take several different shapes, which may correspond to possibly widely different monetary and exchange rate intervention policies. We also show how to use the projection equations and the information about the band to test the credibility of the exchange rate regimes.

Christensen, Michael

TI Nominal Inertia in a Dynamic Model of Product and Labor Market Interactions. **AU** Andersen, Torben M.; Christensen, Michael.

Christiano, Lawrence J.

PD January 1992. **TI** Liquidity Effects and the Monetary Transmission Mechanism. **AU** Christiano, Lawrence J.; Eichenbaum, Martin. **AA** Christiano: Federal Reserve Bank of Minneapolis. Eichenbaum: Northwestern University, National Bureau of Economic Research and Federal Reserve Bank of Chicago. **SR** National Bureau of Economic Research Working Paper: 3974; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E51, E52, E44, E13. **KW** Monetary Shocks. General Equilibrium. Adjustment Costs. Monetary Policy.

AB Several recent papers provide strong empirical support for the view that an expansionary monetary policy disturbance generates a persistent decrease in interest rates and a persistent increase in output and employment. Existing quantitative general equilibrium models, which allow for capital accumulation, are inconsistent with this view. There does exist a recently developed class of general equilibrium models which can rationalize the contemporaneous response of interest rates, output, and employment to a money supply shock. However, a key shortcoming of these models is that they cannot rationalize persistent liquidity effects. This paper discusses the basic frictions and mechanisms underlying this new class of models and investigates one avenue for generating persistence. We argue that once a simplified version of the model in Christiano and Eichenbaum (1991) is modified to allow for extremely small costs of adjusting sectoral flow of funds, positive money shocks generate long-lasting, quantitatively significant liquidity effects, as well as persistent increases in aggregate economic activity.

Chung, Alan

TI Convergence and Growth Linkages between North and South. **AU** Helliwell, John F.; Chung, Alan.

Chung, Tai-Yeong

PD February 1991. **TI** On the Social Optimality of Liquidated Damage Clauses: An Economic Analysis. **AA** University of Western Ontario. **SR** University of

Western Ontario Department of Economics Research Report: 9102; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 40. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** K12, D62. **KW** Contract Law. Competition. Externality.

AB The courts. have imposed limitations on the ability of contractual parties to stipulate their own remedies for breach of contract. The most important restriction denies them the power to stipulate damages that are so large as to be characterized as penalties. The main purpose of this paper is to clarify some of the puzzling aspects of the "penalty doctrine" by providing an economic analysis. It is shown that the rule of freedom of contract under which any liquidated damages are enforced could generate social inefficiency by allowing contracting parties to impose external costs on potential competitors. The rule of penalty doctrine under which unreasonably large liquidated damages are unenforceable could mitigate the inefficiency by placing a cap on the enforceable liquidated damages. It is also shown that the rule of penalty doctrine could mitigate over-investment problems which occur under the traditionally used expectation remedy.

Cohen, Gerald D.

TI Macroeconomic Policy and Elections in OECD Democracies. **AU** Alesina, Alberto; Cohen, Gerald D.; Roubini, Nouriel.

Cooper, Russel J.

PD September 1991. **TI** An Empirically Oriented Demand System with Improved Regularity Properties. **AU** Cooper, Russel J.; McLaren, Keith R. **AA** Cooper: University of Western Sydney. McLaren: Monash University. **SR** Monash Department of Econometrics Working Paper: 8/91; Department of Econometrics, Faculty of Economics and Politics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 28. **PR** no charge. **JE** D12. **KW** Consumer Demand. Consumer Economics. Duality Theory.

AB While the Almost Ideal Demand System (AIDS) has received increasing attention in empirical studies of consumer demand, the fact that the underlying PIGLOG cost function is not globally regular has often led to violation of negative semi-definiteness in the estimated Slutsky matrix. This paper suggests a modification to the PIGLOG class of preferences, termed MPIGLOG, which preserves regularity in a wider region of expenditure-price space. In an empirical section the AIDS special case of PIGLOG is compared with the analogous special case of MPIGLOG, which we term MAIDS. The comparison demonstrates the improved regularity features of MAIDS.

Cooper, Russell

PD November 1991. **TI** Bank Runs: Liquidity and Incentives. **AU** Cooper, Russell; Ross, Thomas W. **AA** Cooper: Boston University and National Bureau of Economic Research. Ross: Carleton University. **SR** National Bureau of Economic Research Working Paper: 3921; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $3.00. **JE** G21, G28. **KW** Banking. Deposit Insurance. Investment.

AB Diamond-Dybvig (1983) provide a model of intermediation in which bank runs are driven by pessimistic depositor expectations. Models which address these issues are important in the ongoing discussion which weighs the costs (incentive problems) and the benefits (preventing runs) of deposit insurance. In the present paper we extend the Diamond-Dybvig analysis to consider several important questions for evaluating deposit insurance that could not be addressed within their framework. First, we provide conditions for runs when banks can invest in both illiquid and liquid projects. This results in a weakening of the conditions necessary for bank runs relative to the Diamond-Dybvig model in which no liquid investments occur in equilibrium. Second, we characterize how banks respond to the possibility of runs in their design of deposit contracts and investment decisions, particularly through the holding of excess reserves. Finally, we use this framework to evaluate the costs and benefits of deposit insurance and other forms of intervention. To do so, we introduce moral hazard and monitoring into the model to explore the incentive effects of deposit insurance. The implementation of a capital requirement can, along with deposit insurance, support the optimal allocation.

Coorey, Sharmini

PD December 1991. **TI** The Determinants of U.S. Real Interest Rates in the Long Run. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/118; International Monetary Fund, Washington, DC 20431. **PG** 27. **PR** not available. **JE** E43, E63, E62. **KW** Interest Rate. Fiscal Policy. Budget Deficit. Government Spending.

AB This paper examines the factors which influence the behavior of real interest rates in the United States over the long-run. Data on real and nominal returns to bonds and equities are tested for unit root nonstationarity. The results indicate that real and nominal interest rates and inflation are integrated of order one while the evidence on returns to equities is mixed. Short- and long-term real rates were found to be cointegrated with government deficits, government debt relative to GNP, private wealth, real balances relative to GNP, demographic factors and the marginal productivity of capital; demographic, fiscal, and monetary policy variables appear to be particularly significant.

Corker, Robert

PD December 1991. **TI** Apartheid, Growth and Income Distribution in South Africa: Past History and Future Prospects. **AU** Corker, Robert; Bayoumi, Tamim. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/116; International Monetary Fund, Washington, DC 20431. **PG** 18. **PR** not available. **JE** J31, J71, O15, O55. **KW** Wage Differentials. Discrimination. Employment.

AB Estimate of a supply-side model of the nonprimary sectors, in which particular attention has been paid to modeling key characteristics of the evolution of the apartheid system, are presented. These imply that the wage differential between white and nonwhite workers doing similar jobs fell significantly over the last two decades to around 14 percent in 1990. This relatively small gap implies that medium-term prospects for the advancement of the disadvantaged groups in South Africa depend heavily on their ability to take up skilled employment, with the direct gains from the elimination of apartheid being relatively small.

Cothren, Richard D.

PD April 1991. **TI** On the Optimality of Reserve Requirements. **AU** Cothren, Richard D.; Waud, Roger N. **AA** Cothren: Virginia Polytechnic Institute and State University. Waud: University of North Carolina, Chapel Hill. **SR** National Bureau of Economic Research Technical Paper: 101; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G21, G29, E44. **KW** Banking. Medium of Exchange. Bank Reserves.

AB An implicit rationale for a bank reserve requirement is that a central monetary authority is in a unique position (as "social planner") to impose a "socially superior" outcome to that yielded by a free banking system. We illustrate how this can be true in the context of a simple economy modeled to mimic certain basic characteristics of a monetary economy with banks and agents who trade with one another. Banks exist in our model because by pooling liquidation risks they provide liquidity otherwise unavailable to depositors, which, in turn, provides the incentive for using deposit claims as the medium of exchange.

Cottarelli, Carlo

TI Cross-Border Deposits and Monetary Aggregates in the Transition to EMU. **AU** Angeloni, Ignazio; Cottarelli, Carlo; Levy, Aviram.

Cukierman, Alex

PD October 1991. **TI** The Dynamics of Optimal Gradual Stabilizations. **AU** Cukierman, Alex; Liviatan, Nissan. **AA** Cukierman: Tel Aviv University. Liviatan: Hebrew University, Jerusalem. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 34-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 43. **PR** no charge. **JE** E63, E31, E52, D78. **KW** Stabilization Policy. Infinite Horizon Model. Credibility. Inflation. Monetary Policy.

AB This paper shows that, even in the absence of long-term contracts, inflation inertia may be quite tenacious because of the simultaneous interaction between policy actions and inflationary expectations in the presence of imperfect credibility. This result is particularly relevant for understanding some failed inflation stabilization efforts in South America. The paper contains several analytical novelties in comparison to the existing literature on credibility of monetary policy. In particular it considers policy-makers with an infinite horizon. Second, since policy-makers do not have perfect control of inflation, a frivolous stabilizer may deviate from the policies of his serious counterpart without necessarily being unmasked immediately. This leads to more general concepts of separation.

Cullity, John P.

PD October 1990. **TI** Indicators of Credit Quality in Thrift Industry Lending. **AU** Cullity, John P.; Moore, Geoffrey H. **AA** Cullity: Rutgers University and Columbia University. Moore: Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-30; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 38. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** G21, G28, E51. **KW** Banking. Bankruptcy. Credit. Government Regulation.

AB This study was initiated by the continuing concern about a deterioration in the quality of credit in the United States. We believe that a generally and promptly available collection of indicators of credit quality, along with an analysis of how they relate to creditors' rates of return and loss experience, would assist investors, managers, policy-makers and the general public in recognizing problems before they become serious, and thus enable them to take appropriate action to thwart undesired consequences. We have compiled and analyzed a collection of monthly and quarterly measures of credit quality that have the desirable attributes of economic indicators, i.e. comprehensive coverage, prompt availability, and economic relevance, which for this project means tested ability to provide early warning of credit deterioration.

PD July 1991. **TI** Forecasting Exports from Eastern Europe Using Leading Indicators. **AU** Cullity, John P.; Moore, Geoffrey H. **AA** Cullity: Rutgers University and Columbia University. Moore: Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-32; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 21. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** F17, O52, F43, F14. **KW** International Trade. Exports. Europe. Economic Growth.

AB One of the factors influencing the past and future growth of Central European countries is the volume of their export trade. The changes in their domestic institutions that are presently taking place will affect their ability to compete in terms of exports. Their export sales will, of course, also depend on changes in economic conditions in other countries. If economic conditions are good in the principal industrialized nations in the 1990's, the prospects for growth of export sales of the new market economies of Central Europe will also be more favorable. This paper examines two leading composite indexes designed to show the prospects for economic growth in the main industrial countries and hence the prospects for exports from the Central European countries.

Currie, Janet

PD January 1992. **TI** Is Arbitration Addictive? Evidence from the Laboratory and the Field. **AU** Currie, Janet; Farber, Henry S. **AA** Currie: Massachusetts Institute of Technology and National Bureau of Economic Research. Farber: Princeton University. **SR** National Bureau of Economic Research Working Paper: 3952; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J52, J53. **KW** Bargaining. Strikes. Mediation.

AB We test for the presence of an addictive effect of arbitration (positive state dependence) using data both from a laboratory bargaining experiment and from the field. We find no evidence of state dependence in the experimental data, and we find weak evidence of positive state dependence in the field data on teachers in British Columbia. Hence, we reject the view that use of arbitration per se leads to state dependence either through reducing uncertainty about the arbitration process or through changing the bargaining parties' perceptions about their opponents. The results further suggest that an explanation for any positive state dependence we find in the British Columbia field data must lie in an aspect of the arbitration process which is not captured by our simple experimental design.

PD January 1992. **TI** The Impact of Collective Bargaining Legislation on Disputes in the U.S. Public Sector: No Policy may be the Worst Policy. **AU** Currie, Janet; McConnell, Sheena. **AA** Currie: Massachusetts Institute of Technology and National Bureau of Economic Research. McConnell: Mathematica Policy Research, Washington D.C. **SR** National Bureau of Economic Research Working Paper: 3978; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J52, J58, J45. **KW** Collective Bargaining. Labor Negotiations. Strike Duration.
AB This paper estimates the impact of collective bargaining legislation on disputes during labor negotiations in the U.S. public sector. We use a large national sample of U.S. state and local government contracts to compare the incidence and intensity of disputes by similar workers under different forms of collective bargaining legislation. The breadth of our data allows us to examine the impact of five different forms of legislation. Our principal finding is that strike costs, measured by strike duration and the number of working days lost, are highest in jurisdictions that provide no explicit framework for bargaining or dispute resolution.

Cutler, David M.
PD January 1992. **TI** Rising Inequality? Changes in the Distribution of Income and Consumption in the 1980s. **AU** Cutler, David M.; Katz, Lawrence F. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3964; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** I31, D63, E21, D31, I32. **KW** Income Distribution. Consumption. Poverty.
AB This paper examines changes in the distribution of income and consumption in the United States during the 1980's, using data from the Current Population Survey (income) and Consumer Expenditure Survey (consumption). We reach three primary conclusions. First, changes in the distribution of consumption parallel changes in the distribution of income. The lowest quintile of the consumption distribution received 0.9 percentage points less of total consumption in 1988 than in 1980; the corresponding decline for income was 0.6 percentage points. Second, broad conclusions concerning recent changes in consumption distribution are not very sensitive to the exact choice of a measure of family needs. Under a wide variety of alternative household equivalence scales, there is a widening in the consumption distribution in the 1980s. Third, the use of consumption measures of well-being in place of measures based on current money income does change conclusions concerning the extent of poverty in the United States.

Dalmazzo, Alberto
PD November 1991. **TI** Firm's Debt and Finite-Horizon Wage Bargaining. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 54; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 29. **PR** no charge. **JE** G32, J53. **KW** Bargaining. Wages. Capital Structure.
AB The simple bargaining model presented here analyzes the effect of a predetermined level of debt repayment commitments on the wage bargaining process between a firm and its workforce. Even if the bargaining structure is basically derived from Rubinstein (1982), the presence of debt's interests maturing over time is shown to imply finiteness in the bargaining horizon. The main consequence is that, in contrast with Rubinstein (1982), the parties' outside options always enter the perfect equilibrium payoffs, justifying their presence in the econometric specifications.

Davies, Hugh
TI Child Care and Mothers' Lifetime Earnings: Some European Contrasts. **AU** Joshi, Heather; Davies, Hugh.

Davies, James B.
PD September 1991. **TI** Income Inequality and International Migration. **AU** Davies, James B.; Wooton, Ian. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9111; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 27. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** F22, D31, J61, J21. **KW** Income Distribution. Migration. International Trade.
AB This paper provides a theoretical analysis of the impact of international factor movements on the personal distribution of income. It distinguishes between two types of labor (skilled and unskilled) and focuses on the consequences of their migration. There is a simple, yet powerful, relationship between factor flows, the structure of domestic production, and changes in inequality in a country. The effects of labor migration are shown to depend on whether skilled labor and unskilled labor are "friends" or "enemies" in production. We conclude with a discussion of the likely impact on inequality of some past and current migrations.

Davies, Sally M.
PD October 1991. **TI** Accounting for Prediction Variance in Event Studies. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 173; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 9. **PR** no charge. **JE** G12, C52, C22. **KW** Forecasting. Stock Market. Asset Pricing.
AB This paper demonstrates that a test statistic developed by Patell (1976) is incorrectly specified in the general case of correlated prediction errors. Patell's statistic is commonly used in event studies to test the significance of cumulative prediction errors. This paper develops a new statistic that allows for correlated prediction errors. In the general case of correlated prediction errors, this new statistic is more accurate than the statistic suggested by Patell. In addition, the statistic presented here has greater power than an extant test statistic that also accounts for correlated prediction errors.

Davis, Phil
PD August 1991. **TI** Corporate Finance in the Euromarkets and the Economics of Intermediation. **AU** Davis, Phil; Mayer, Colin P. **AA** Davis: Bank of England. Mayer: City University Business School, London. **SR** Centre for Economic Policy Research Discussion Paper: 570; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 32. **PR** 3

pounds ($5.00). **JE** G15, F21, G32. **KW** Financial Intermediation. Banking. Corporate Finance.
AB This paper examines bond and syndicated bank finance in the Euromarkets. It uses a comprehensive data bank on Euromarkets to evaluate alternative theories of financial intermediation. A model is estimated that provides a good description of firms choice of finance. The paper concludes that Euromarkets are best described by control ("transactions banking") rather than commitment ("relationship banking"). Bank and bond markets are not perfect substitutes, however, even for large companies: the financing of high-risk projects requires the involvement of banks. Banks therefore retain a central function and the operation of bank syndicates is crucial to the financing of large corporations.

Davis, Steve J.

TI Borrowing Constraints and Two-Sided Altruism with an Application to Social Security. **AU** Altig, David; Davis, Steve J.

De Grauwe, Paul

PD January 1992. **TI** Psychological Barriers in the Foreign Exchange Market. **AU** De Grauwe, Paul; Decupere, Danny. **AA** Katholieke Universiteit Leuven, Belgium. **SR** Centre for Economic Policy Research Discussion Paper: 621; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 16. **PR** 3 Pounds ($5.00). **JE** F31, G15, G14. **KW** Exchange Rate. International Markets.
AB This paper undertakes an empirical analysis of the existence of psychological barriers in the dollar/DM and the dollar /yen exchange markets. Psychological barriers occur when agents attach some special importance to the last trailing digits of the price of an asset or a currency. Our empirical results indicate that psychological barriers exist and are significant in the dollar-yen market. Market exchange rates tend to resist movements towards numbers such as 130, 140, ... per dollar etc. In addition, once these barriers have been crossed, exchange rates accelerate away from them. The evidence of psychological barriers in the dollar/DM market is less clear-cut.

De Gregorio, Jose

PD October 1991. **TI** The Effects of Inflation on Economic Growth: Lessons from Latin America. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/95; International Monetary Fund, Washington, DC 20431. **PG** 9. **PR** not available. **JE** E31, O42, O54. **KW** Inflation. Monetary Growth. Capital Productivity. Capital Accumulation.
AB This paper investigates the relationship between inflation and long-run growth. It presents an endogenous growth model that illustrates the channels through which inflation affects growth. The model highlights the effects of inflation on the productivity of capital and the rate of capital accumulation. The reduction in growth is caused by a diversion of resources away from activities that lead to faster rates of growth toward activities associated with reducing the costs of inflation. The negative association between inflation and growth is assessed empirically for a sample group of Latin American countries.

de Laguiche, Sylvie

TI A Quasi Process Free Valuation Model of Floating Rate Instruments Theory and Instruments. **AU** Jacquillat, Bertrand; de Laguiche, Sylvie.

De Long, J. Bradford

PD November 1991. **TI** Productivity and Machinery Investment: A Long Run Look 1870-1980. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3903; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** $3.00. **JE** O41, O14, D24. **KW** Economic Growth. Productivity. Business Investment.
AB Over the past century the long-run growth of six economies shows a strong association between investment in machinery and economic growth that holds both within and across nations and periods. A similar strong association holds for the post-World War II period for a broader cross-section of nations. A number of considerations suggest that this association is causal, and that a high rate of machinery investment is a necessary prerequisite for rapid long-run productivity growth - a hypothesis also supported by narratives from the history of technology.

PD November 1991. **TI** The Marshall Plan: History's Most Successful Structural Adjustment Program. **AU** De Long, J. Bradford; Eichengreen, Barry. **AA** De Long: National Bureau of Economic Research. Eichengreen: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3899; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 58. **PR** $3.00. **JE** N14, O19, E65. **KW** Foreign Aid. Europe. Foreign Investment. Market Structure.
AB The post-World War II reconstruction of Western Europe was one of the greatest economic policy and foreign policy successes of this century. "Folk wisdom" assigns a major role in successful reconstruction to the Marshall Plan: the program that transferred some $13 billion to Europe in the years 1948-51. We examine the economic effects of the Marshall Plan, and find that it was not large enough to have significantly accelerated recovery by financing investment, aiding the reconstruction of damaged infrastructure, or easing commodity bottlenecks. We argue, however, that the Marshall Plan did play a major role in setting the stage for post-World War II Western Europe's rapid growth. The conditions attached to Marshall Plan aid pushed European political economy in a direction that left its post-World War II "mixed economies" with more "market" and less "controls" in the mix.

TI Why does the Stock Market Fluctuate? **AU** Barsky, Robert B.; De Long, J. Bradford.

Decupere, Danny

TI Psychological Barriers in the Foreign Exchange Market. **AU** De Grauwe, Paul; Decupere, Danny.

Del Boca, Daniela

PD December 1991. **TI** Cooperation between Divorced Parents and Compliance with Child Support Orders. **AU** Del Boca, Daniela; Flinn, Christopher. **AA** Del Boca: University of Turin. Flinn: New York University. **SR** New York University Economic Research Reports: 91-68; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 47. **PR** no charge. **JE** J12, J13. **KW** Child

Support. Children. Divorce.
AB We explore the relationship between cooperation among divorced parents regarding expenditures on child-specific goods and compliance with child support orders. We make the argument that in a static context, there exists no credible way for a custodial parent to threaten the parent under orders to pay child support with noncooperation if legal child support obligations are not met, though this result will not generally hold in a dynamic setting. The behavior of parents and institutional agents concerned with the welfare of the children of divorced parents is compared when parental behavior is noncooperative as opposed to cooperative. Finally, the sensitivity of inferences regarding parental preferences to assumptions concerning the mode of interaction between divorced parents is illustrated by means of an empirical example.

DeRosa, Dean A.

PD October 1991. **TI** Increasing Export Diversification in Commodity-Exporting Countries: A Theoretical Analysis. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/105; International Monetary Fund, Washington, DC 20431. **PG** 19. **PR** not available. **JE** F15, F36, F11. **KW** International Trade. Exports. Trade Policy. International Finance.
AB This paper draws on the neoclassical theory of international trade to examine the limits of efficient export diversification in low-income, commodity-exporting countries. It demonstrates the fundamental importance of relative factor endowments among countries for determining the commodity composition of international trade flows under both certain and uncertain economic conditions. In recognition of the importance of international financial markets for risk-spreading and allocating resources efficiently under uncertainty, the paper emphasizes the importance of "open" economic policies towards international trade in financial assets as well as goods.

Diamond, Peter

TI The Flow Approach to Labor Markets. **AU** Blanchard, Olivier Jean; Diamond, Peter.

Dickens, William T.

TI An Analysis of the Nature of Unemployment in Sri Lanka. **AU** Lang, Kevin; Dickens, William T.

Dillingham, Alan E.

PD July 1991. **TI** Sex Discrimination by Sex: Voting in a Professional Society. **AU** Dillingham, Alan E.; Ferber, Marianne A.; Hamermesh, Daniel S. **AA** Dillingham: Illinois State University. Ferber: University of Illinois, Urbana-Champaign. Hamermesh: Michigan State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3789; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J71, D72. **KW** Discrimination. Voting. Professional Associations.
AB Economic theories of discrimination are usually based on tastes. The huge body of empirical studies, however, considers the discriminatory outcomes that are the reduced-form results of interactions between tastes and opportunity sets. None examines tastes for discrimination directly, or considers people's willingness to trade off other characteristics to indulge their tastes. We study these trade-offs using a set of data on votes for officers in a professional association. The evidence shows that female voters are much more likely to vote for female than for male candidates, and that other affinities between them and a candidate have little effect on their choices. Male voters are slightly more likely to vote for female candidates, but their choices are easily altered by other affinities to a candidate.

PD July 1991. **TI** Sex Discrimination by Sex: Voting in a Professional Society. **AU** Dillingham, Alan E.; Ferber, Marianne A.; Hamermesh, Daniel S. **AA** Dillingham: Illinois State University. Ferber: University of Illinois. Hamermesh: Michigan State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3789; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $3.00. **JE** J16, J71. **KW** Voting. Gender. Sex Discrimination.
AB Economic theories of discrimination are usually based on tastes. The huge body of empirical studies, however, considers the discriminatory outcomes that are the reduced-form results of interactions between tastes and opportunity sets. None examines tastes for discrimination directly, or considers people's willingness to trade-off other characteristics to indulge their tastes. We study these trade-offs using a set of data on votes for officers in a professional association. The evidence shows that female voters are much more likely to vote for female than for male candidates, and that other affinities between them and candidate have little effect on their choices. Male voters are slightly more likely to vote for female candidates, but their choices are easily altered by other affinities to a candidate.

Dinopoulos, Elias

PD December 1991. **TI** Market Liberalization Policies in a Reforming Socialist Economy. **AU** Dinopoulos, Elias; Lane, Timothy D. **AA** Dinopoulos: University of Florida. Lane: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/119; International Monetary Fund, Washington, DC 20431. **PG** 22. **PR** not available. **JE** P27, P33, P24, P21. **KW** Bargaining. Socialism. Trade Policy.
AB This paper presents a model of a socialist economy, incorporating bargaining over wages and employment in the socialized sector, efficiency wages in the non-socialized sector, and shortages which are reflected in the black market. The model is used to analyze the implications of liberalization policies, including trade liberalization, an administered price increase, and permission for increased direct foreign investment. The results suggest, among other things, that reforms may have different effects under different trade regimes; and that small price reforms may have perverse effects.

Disney, Richard

PD February 1990. **TI** Why are there so Many Long Term Sick in Britain? **AU** Disney, Richard; Webb, Steven. **AA** Disney: University of Kent and Institute for Fiscal Studies. Webb: Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/3; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 16. **PR** 3 pounds. **JE** I11, I12, I18. **KW** Unemployment. Health Care. Disability. Public Health.

AB The paper examines the upward trend of numbers in receipt of Invalidity Benefit (the major contributor benefit for the long-term sick) in Britain since 1971. Possible explanations include the rising level of unemployment through much of the period; the heightened link between ill health and early retirement; changes in the real level of benefits; and changes in the composition of the workforce. These possibilities are examined using a variety of methodologies; time series, cross-section and fixed effects models.

PD September 1990. **TI** Do Wage Differentials Compensate Occupational Pension Entitlements?

Preliminary Look at the Evidence. **AU** Disney, Richard; Whitehouse, Edward. **AA** Disney: University of Kent. Whitehouse: Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/10; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 28. **PR** 3 pounds. **JE** J31, J32, J33. **KW** Wage Structure. Pensions. Fringe Benefits.
AB Occupational pensions and other fringe benefits are of growing importance in the remuneration of employees. Having established a method of identifying occupational pension status in the Family Expenditure Survey, the authors use this data source and the General Household Survey to look at the determinants of occupational pension coverage. The results of a test of the compensating differential model of wage determination are then reported. The principal finding is that wages and pensions do not appear to be negatively correlated as required by the compensating differential model.

Dolado, Juan J.

TI Investigating Private and Public Saving-Investment Gaps in EC Countries. **AU** Ballabriga, Fernando C.; Dolado, Juan J.; Vinals, Jose.

TI Efficiency in the Peseta Forward Exchange Rate Market. **AU** Ayuso, Juan; Dolado, Juan J.; Sosvilla-Rivero, Simon.

Dominguez, Kathryn M.

PD January 1992. **TI** The Role of International Organizations in the Bretton Woods System. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3951; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 61. **PR** $3.00. **JE** O19, F02, F33, F31. **KW** Monetary Integration. International Organizations. Exchange Rate.
AB This paper examines the roles played by organizations in maintaining the Bretton Woods System. Theory indicates that even if countries understand that cooperation will lead them to a Pareto superior outcome, they need not cooperate unless they are convinced that other countries are also committed to doing so. In this context international organizations can facilitate cooperation by serving as commitment mechanisms. Cooperation in the Bretton Woods System involved the maintenance of stable exchange rates and unrestricted trade among member countries. The commitment mechanisms that the Bretton Woods Institutions provided member countries included: rules of cooperation, financial resources to enable them to play by the rules, and a centralized source of information on each others' commitment to the rules. Post-war history suggests that information monitoring and sharing has been a relatively effective commitment mechanism for international organizations.

Donohue, John

TI Continuous Versus Episodic Change: The Impact of Civil Rights Policy on the Economic Status of Blacks. **AU** Heckman, James J.; Donohue, John.

Dooley, Michael P.

PD November 1991,. **TI** Establishing Incentive Structures and Planning Agencies that Support Market-Oriented Transformations. **AU** Dooley, Michael P.; Isard, Peter. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/113; International Monetary Fund, Washington, DC 20431. **PG** 12. **PR** not available. **JE** P23, E63, L33, P31. **KW** Stabilization Policy. Privatization. Employment. Socialist Enterprise.
AB This note addresses various types of incentives that must be established before a market economy can function effectively. It also argues that the enormous challenge of restructuring large industrial enterprises or reabsorbing their workers, while appropriately based on market signals, cannot be accomplished by the market alone. Some type of planning will eventually be required. Ideally, such planning should receive high priority from the outset with clear recognition that durable macroeconomic stabilization will be very difficult to achieve in a democratic political system until the large state enterprises have been successfully transformed or their workers reabsorbed.

Dornbusch, Rudiger

PD November 1991. **TI** Moderate Inflation. **AU** Dornbusch, Rudiger; Fischer, Stanley. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3896; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E31, E52, E63, E62. **KW** Central Bank. Monetary Policy. Fiscal Policy. Hyperinflation. Seigniorage.
AB Inflation persists at moderate rates of 15-30 percent in all the countries that successfully reduced triple digit inflations in the 1980's. Several other countries, for example Colombia, have experienced moderate inflation for prolonged periods. In this paper we first set out theories of persistent inflation, which can be classified into those emphasizing seigniorage as a source of government finance and those that emphasize the costs of ending inflation. We then examine the sources and persistence of moderate inflation episodes. Most were triggered by commodity price shocks; they were brief, and very few ended in higher inflation. We then present case studies of eight countries, including three that now suffer from moderate inflation, and four that successfully moved down to single digit inflation rates. We examine the roles of seigniorage, indexation and disindexation, the exchange rate commitment, and monetary and fiscal policy. The evidence suggests that seigniorage plays at most a modest role in the persistence of moderate inflations, and that such inflations can be reduced only at a substantial short-term cost to growth.

Drazen, Allan

TI Trigger Points and Budget Cuts: Explaining the Effects of Fiscal Austerity. **AU** Bertola, Giuseppe; Drazen, Allan.

TI Trigger Points and Budget Cuts: Explaining the Effects of Fiscal Austerity. **AU** Bertola, Giuseppe; Drazen, Allan.

Dumas, Bernard

PD December 1991. **TI** How Long Do Unilateral Target Zones Last? **AU** Dumas, Bernard; Svensson, Lars E. O. **AA** Dumas: University of Pennsylvania and National Bureau of Economic Research. Svensson: Stockholm University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3931; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 12. **PR** $3.00. **JE** F31, E52, E42. **KW** Exchange Rate. Central Bank. Monetary Policy.

AB We examine the expected survival time of a unilateral exchange rate target zone, when constraints on monetary policy prevent the central bank from exclusively focusing on defending the target zone. Generally, the width of the target zone has a negligible effect on the expected survival time, and the dominant determinants are reserve levels and the degree of real and monetary divergence between the country in question and the rest of the world. For seemingly realistic parameters, the expected survival time is fairly long: a few decades rather than a few years.

Duncan, Alan

PD June 1990. **TI** Labor Supply Decisions and Non-Convex Budget Sets: The Case of National Insurance Contributions in the U.K. **AA** Institute for Fiscal Studies and University of York. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/7; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 36. **PR** 3 pounds. **JE** J22, J21, I38. **KW** Labor Supply. National Insurance. Health Insurance.

AB Recent work on the impact of the National insurance regime on labor supply behavior has revealed significant bunching in the earnings distribution of certain demographic groups at NI thresholds. Single parents and married women are noted to display particular sensitivity to a National Insurance regime which renders the budget constraint discontinuous at low income levels. However, most work on labor supply behavior fails to account for such bunching at NI margins in their estimation procedures. This paper contends that labor supply estimates which fail to recognize grouping at NI margins are potentially biased, and derives an algorithm by which non-convex budget sets can be incorporated into the estimation procedure. Taking a sample of married women from the 1984 Family Expenditure Survey, a comparison of model predictions reveals a consistent under-estimation of desired hours by continuous labor supply functions. Moreover, the omission of a mechanism to account for a NI regime such as the one enforced in 1984 is seen to mask a significant degree of backward-bending labor supply behavior.

Duraisamy, P.

PD February 1990. **TI** Impact of Public Programs on Fertility and Gender Specific Investment in Human Capital of Children in Rural India: Cross Sectional and Time Series Analyses. **AU** Duraisamy, P.; Malathy, R. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 596; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven CT 06520. **PG** 32. **PR** $2.00 + postage. **JE** J13, H51, H52, I11, I21. **KW** Children. Fertility. Public Programs. Health Care. Education.

AB This paper examines the impact of the public programs, namely family planning, health and education, on household child investment decisions with a household production framework using district level aggregate time series of cross-section data for two periods, 1971 and 1981 for rural India. The cross-sectional estimates show that the own program effects of health reduce family size in both years, and education increases the investment in the sex-specific schooling of children only in 1971. Family planning clinics exert a significant negative effect on fertility only in 1971. The cross program effects show that the presence of a secondary school in a village reduces the demand for number of children in both years whereas the primary health centers and hospitals increase the schooling of both boys and girls only in the most recent period. An important finding is that an increase in the proportion of females with matriculation and above would reduce the family size and increase schooling of female children, and thus reduce the inequality in male and female enrollments.

Durlauf, Steven N.

PD February 1992. **TI** Local Versus Global Convergence across National Economies. **AU** Durlauf, Steven N.; Johnson, Paul A. **AA** Durlauf: Stanford University and National Bureau of Economic Research. Johnson: University of Oregon. **SR** National Bureau of Economic Research Working Paper: 3996; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O57, O11, O41, F43. **KW** Growth Rate. Output. Economic Growth. Economic Development.

AB This paper reexamines the ability of the Solow-type models to explain the pattern of cross-country growth rates. Recent authors, most notably Mankiw, Romer and Weil (1990), have argued that differences in national growth rates are compatible with the view that each country has access to a common, neoclassical aggregate production function. Such models imply that, conditional on population growth and savings rates, disparate economies are converging over time to the same level of per capita output. We argue that cross-country growth is better explained by a model of local versus global convergence. Countries converge locally in the sense that economies with similar initial conditions tend to converge to one another. However, we find little evidence of convergence across economies with substantially different initial conditions as measured by per capita output or literacy rates. Further, the impact of capital formation on aggregate output increases with the level of economic development. These results are consistent with models of multiple equilibria in long-run behavior. Our results suggest that the Solow growth model should be supplemented with a theory of aggregate production function differences in order to fully explain international growth patterns.

Eckstein, Zvi

PD December 1991. **TI** On the Many Kinds of Growth. **AU** Eckstein, Zvi; Foulides, Costas; Kollintzas, Tryphon. **AA** Eckstein: Tel Aviv University. Foulides and Kollintzas: Athens University. **SR** Centre for Economic Policy Research Discussion Paper: 592; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 39. **PR** 3 Pounds ($5.00). **JE** O41, O58. **KW** Economic Growth. General Equilibrium Model. Competitive Equilibrium.

AB In this paper we synthesize exogenous and endogenous sources of economic growth in a stochastic dynamic general equilibrium model. Endogenous growth can be engendered by internal constant returns to scale or be external increasing returns to scale in the production of human capital or in the production of goods. We provide existence and characterization results for a recursive competitive equilibrium. We show how the different sources of growth combine to generate a plethora of potential growth patterns. Of special interest are the possibilities of steady-state exogenous growth and vice versa. We also characterize the social optimum and a tax-subsidy scheme that supports the social optimum as a recursive competitive equilibrium.

PD December 1991. **TI** The Effects of Compulsory Schooling on Growth Income Distribution and Welfare. **AU** Eckstein, Zvi; Zilcha, Itzhak. **AA** Eckstein: Boston University and Tel Aviv University. Zilcha: Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 38-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 33. **PR** no charge. **JE** I28, J62, O15, J24. **KW** Education. Income Distribution. Economic Development. Human Capital.

AB In this paper we consider an OLG model with productive capital and human capital affecting the quality of labor. In each generation parents invest in their children's education but disregard its external effect on the aggregate production function. Government intervention in providing compulsory schooling increases economic growth (along the equilibrium path), while the intragenerational income distribution becomes more equal. Also, the majority of individuals in each generation are better off.

Eichenbaum, Martin

TI Liquidity Effects and the Monetary Transmission Mechanism. **AU** Christiano, Lawrence J.; Eichenbaum, Martin.

Eichengreen, Barry

PD October 1991. **TI** Designing a Central Bank for Europe: A Cautionary Tale from the Early Years of the Federal Reserve System. **AA** University of California, Berkeley. **SR** Centre for Economic Policy Research Discussion Paper: 585; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 28. **PR** 3 pounds ($5.00). **JE** E42, E58, F36, F33. **KW** Central Bank. European Community. Monetary Policy.

AB Important questions concerning the structure and operation of a European Central Bank remain unanswered. Although there exists no precedent for the process of institution-building in which the European Community is currently engaged, the founding and early operations of the Federal Reserve System in the United States provide a suggestive parallel. The U.S. experience suggests that Stage 2 of the Delors Plan contains potential sources of instability and provides an argument for direct transition from Stage 1 (national monetary autonomy) to Stage 3 (centralization of authority). It also suggests the need for more thought about voting and mediation procedures to be used to reconcile and aggregate national interests.

PD October 1991. **TI** The Interwar Economy in a European Mirror. **AA** University of California, Berkeley. **SR** Centre for Economic Policy Research Discussion Paper: 589; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 30. **PR** 3 pounds ($5.00). **JE** N14. **KW** Britain. Economic History. Economic Growth. Economic Development.

AB This paper surveys the economic history of Britain during the interwar years. It contrasts developments in Britain with developments elsewhere in Europe and asks in what respects was British experience distinctive. Successive sections examine the economic consequences of World War I, the performance of the interwar economy, and the legacy of interwar experience for the postwar period.

TI Halting Inflation in Italy and France after World War II. **AU** Casella, Alessandra; Eichengreen, Barry.

TI The Marshall Plan: History's Most Successful Structural Adjustment Program. **AU** De Long, J. Bradford; Eichengreen, Barry.

TI Shocking Aspects of Monetary Unification. **AU** Bayoumi, Tamim; Eichengreen, Barry.

TI Is There a Conflict between EC Enlargement and European Monetary Unification? **AU** Bayoumi, Tamim; Eichengreen, Barry.

TI Shocking Aspects of Monetary Unification. **AU** Bayoumi, Tamim; Eichengreen, Barry.

TI Is There a Conflict between EC Enlargement and European Monetary Unification. **AU** Bayoumi, Tamim; Eichengreen, Barry.

Elmendorf, Douglas W.

PD November 1991. **TI** Taxation of Labor Income and the Demand for Risky Assets. **AU** Elmendorf, Douglas W.; Kimball, Miles S. **AA** Elmendorf: Harvard University. Kimball: University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3904; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** $3.00. **JE** H31, D11, G11, D81. **KW** Portfolio Choice. Risk. Decision Theory. Consumer Economics.

AB The effect of uninsured labor income risk on the joint saving/portfolio composition decision is analyzed using new techniques from the theory of multiple risk-bearing. Applying this analysis, the effect of labor income taxes on the demand for risky securities is considered. It is well known that when private insurance markets are incomplete, the insurance afforded by labor income taxes can reduce overall saving. This paper establishes that - given plausible restrictions on preferences - the insurance afforded by labor income is statistically independent of the returns to risky securities.

Engle, Robert F.

TI Do Bulls and Bears Move across the Borders? International Transmission of Stock Returns and Volatility as the World Turns. **AU** Lin, Wen-Ling; Engle, Robert F.; Ito, Takatoshi.

Epstein, Larry G.

PD July 1991. **TI** The Independence Axiom and Asset Returns. **AU** Epstein, Larry G.; Zin, Stanley E. **AA** Epstein: University of Toronto. Zin: Carnegie Mellon University and National Bureau of Economic Research.

SR National Bureau of Economic Research Technical Paper: 109; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G12. **KW** Asset Pricing. Stock Market. Bonds.

AB This paper integrates models of atemporal risk preference that relax the independence axiom into a recursive intertemporal asset pricing framework. The resulting models are amenable to empirical analysis using market data and standard Euler equation methods. We are thereby able to provide the first non-laboratory based evidence regarding the usefulness of several new theories of risk preference for addressing standard problems in dynamic economics. Using both stock and bond returns data, we find that a model incorporating risk preferences that exhibit first order risk aversion accounts for significantly more of the mean and autocorrelation properties of the data than models that exhibit only second order risk aversion.

Evans, Martin D. D.

PD February 1992. **TI** Peso Problems and Heterogeneous Trading: Evidence from Excess Returns in Foreign Exchange and Euromarkets. **AU** Evans, Martin D. D.; Lewis, Karen K. **AA** Evans: New York University. Lewis: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4003; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G12, F31, G15. **KW** Excess Returns. Asset Pricing. Risk Premia. Foreign Exchange.

AB Theoretical and empirical studies have treated excess returns as processes with time-varying but temporary disturbances. By contrast, empirical evidence indicates that the behavior of asset price levels can be well-approximated by processes with some permanent disturbances. These two observations restrict the relationship between the levels of asset prices and the excess returns they generate. In this paper, we begin by testing these restrictions for foreign exchange and bond returns. Surprisingly, we reject these restrictions for some returns, implying that excess returns contain some permanent shocks. We then evaluate the possible reasons for these results. This behavior appears inconsistent with conventional models of the risk premia. On the other hand, this behavior could arise from the presence of some traders in the market who have "regressive expectations" or from anticipated shifts in the distribution of asset prices inducing a "peso problem." We test and reject a simple model implied by a steady-state presence of traders with regressive expectations. However, we cannot distinguish between a model where the effects of these traders vary over time or where a peso problem exists or both.

Evenson, Robert E.

TI Agricultural Research Productivity in Pakistan. **AU** Azam, Qazi Tauqir; Bloom, Erik A.; Evenson, Robert E.

Fair, Ray C.

PD February 1992. **TI** The Cowles Commission Approach, Real Business Cycle Theories, and New Keynesian Economics. **AA** Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3990; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E32, E37, E17, B22. **KW** Structural Models. Testing. Model Specification. Macroeconomics.

AB The Cowles Commission approach is reviewed and compared to the approaches of real business cycle (RBC) theorists and new Keynesian economists. It is argued that RBC models are not tested in a serious enough way and that the new Keynesian literature is not empirical enough for testing even to be a serious possibility. Macroeconomics seems to be moving away from its traditional empirical basis, which is sad. This paper argues for returning to the path that was abandoned by most macroeconomists around 1970, namely the specification and testing of structural macroeconometric models.

Farber, Henry S.

TI Is Arbitration Addictive? Evidence from the Laboratory and the Field. **AU** Currie, Janet; Farber, Henry S.

Farmer, Roger E. A.

TI Indeterminacy and Increasing Returns. **AU** Benhabib, Jess; Farmer, Roger E. A.

Faruqee, Hamid

PD November 1991. **TI** Dynamic Capital Mobility in Pacific Basin Developing Countries: Estimation and Policy Implication. **AA** Princeton University. **SR** International Monetary Fund Working Paper: WP/91/115; International Monetary Fund, Washington, DC 20431. **PG** 19. **PR** not available. **JE** F21, G15, F41. **KW** Capital Movements. International Finance. Monetary Policy. Capital Flows.

AB This paper estimates empirically the changing degree of capital mobility in several Pacific Basin countries that have pursued financial liberalization in recent years. Tracing the impact of the liberalization process on the capital account, the paper also examines the implications for monetary policy operating in this changing economic environment. Empirical estimates support an overall finding of increased capital mobility in the region over the past decade. However, country experiences, with the exception of Singapore, have been more episodic - - oscillating between periods of high and low financial openness - - rather than uniform in regard to changing capital mobility.

Feenberg, Daniel R.

PD November 1991. **TI** Which Households Own Municipal Bonds? Evidence from Tax Returns. **AU** Feenberg, Daniel R.; Poterba, James M. **AA** Feenberg: National Bureau of Economic Research. Poterba: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3900; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 13. **PR** $3.00. **JE** G11, H24, H23, H31. **KW** Income Taxes. Interest Income. Portfolio Choice.

AB This paper uses data from 1988 federal income tax returns, which asked taxpayers to report their tax-exempt interest income as an information item, to analyze the distribution of tax-exempt asset holdings. More than three-quarters of the tax-exempt debt held by households was held by those with marginal tax rates of 28% or more. The paper reports two measures of the average marginal tax rate on tax-exempt debt. The first measures the increase in taxes if a small fraction of each taxpayer's exempt interest income were converted to taxable interest. This weighted average of "first-dollar" marginal tax rates was 25.8%. A second calculation finds that if all tax-exempt interest were reported as taxable interest, taxes would rise by 27.6% of the increase in taxable interest. Many taxpayers who have substantial tax-exempt interest receipts, but low first-dollar marginal tax rates, would be driven into higher tax brackets if the exemption were eliminated but their portfolios remained the same.

Feldstein, Martin

PD January 1992. **TI** Social Security Rules and Marginal Tax Rates. **AU** Feldstein, Martin; Samwick, Andrew. **AA** Feldstein: National Bureau of Economic Research and Harvard University. Samwick: National Bureau of Economic Research and Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 3962; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 46. **PR** $3.00. **JE** H55, H23, H24, H31. **KW** Social Security. Pensions. Retirement. Taxes.

AB The analysis in this paper shows how current social security benefits have created a variety of social security net marginal tax rates that differ by age, sex, dependency status, and income in ways that defy serious economic or social justification. The existing pattern of marginal rates distorts the incentive for each individual to work at different ages and the division of work within the household. Although the net marginal rate of social security taxes is very low for some employees and actually negative for substantial numbers of employees, the full statutory 11.2 percent rate without any offsetting benefits applies to young workers, to women who will collect as dependents, and to the very poor. Modifications of existing rules could reduce some of the distorting incentives without changing the basic structure of the social security program or its overall net cost.

PD January 1992. **TI** The Budget and Trade Deficits aren't Really Twins. **AA** National Bureau of Economic Research and Harvard University. **SR** National Bureau of Economic Research Working Paper: 3966; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E62, F31, E21, H62. **KW** Savings. Investment. Trade Deficit. Capital Flows.

AB Although the link between the U.S. budget deficit and trade deficit in the 1980's was so clear that the two were popularly labeled the twin deficits, it is wrong to generalize from the American experience of the 1980's to the conclusion that budget deficits and trade deficits are two sides of the same coin. An increased budget deficit (or other reduction in national saving) must reduce either private investment or net exports but the division between them depends on certain key parameters and on changes in the external environment. Although more than 90 percent of the savings decline in the United States in the first half of the 1980's was offset by an increase in the international deficit and the associated capital inflow, this was not an inevitable result. Without the powerful incentives for business investment in the 1981 tax legislation, there might have been less investment and a smaller increase in the trade deficit. The response to a reduction in national saving is not likely to be the same in the long-run as in the short-run.

Ferber, Marianne A.

TI Sex Discrimination by Sex: Voting in a Professional Society. **AU** Dillingham, Alan E.; Ferber, Marianne A.; Hamermesh, Daniel S.

Hamermesh, Daniel S.

TI Sex Discrimination by Sex: Voting in a Professional Society. **AU** Dillingham, Alan E.; Ferber, Marianne A.; Hamermesh, Daniel S.

Fernandez, Raquel

PD February 1992. **TI** Human Capital Accumulation and Income Distribution. **AU** Fernandez, Raquel; Rogerson, Richard. **AA** Fernandez: Boston University and National Bureau of Economic Research. Rogerson: University of Minnesota and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3994; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** I21, I22, H31, J24. **KW** Educational Subsidies. Voting. Education. Tax Policy.

AB This paper analyzes the extent to which education will be subsidized when the subsidy rate is determined by majority voting. The analysis takes place in a framework where education is a discrete decision and all individuals would like to obtain an education because of its effect on future earnings. Individuals differ in their initial income levels. The non-existence of credit markets implies that initial income is a determinant of who actually obtains an education. We consider the outcome of a process in which income is taxed to provide subsidies for education, and taxes are chosen by majority voting. We characterize the outcome as a function of both the level and the distribution of income in the economy. In particular we derive conditions under which middle income individuals ally themselves with upper income individuals at the expense of lower income individuals, and vice versa. The analysis determines the relationship between human capital accumulation and distribution of income.

Fershtman, Chaim

TI The Effect of Insider Trading on Insiders' Reaction to Opportunities to "Waste" Corporate Value. **AU** Bebchuk, Lucian; Fershtman, Chaim.

TI The Effects of Insider Trading on Insider's Choice among Risky Investment Projects. **AU** Bebchuk, Lucian; Fershtman, Chaim.

TI Disadvantageous Semicollusion. **AU** Gandal, Neil; Fershtman, Chaim.

Fischer, Stanley

TI Moderate Inflation. **AU** Dornbusch, Rudiger; Fischer, Stanley.

Flinn, Christopher

TI Cooperation between Divorced Parents and Compliance with Child Support Orders. **AU** Del Boca, Daniela; Flinn, Christopher.

PD December 1991. **TI** Equilibrium Dismissal without Stigma. **AA** New York University. **SR** New York University Economic Research Reports: 91-70; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 33. **PR** no charge. **JE** J41, J63. **KW** Wages. Unemployment. Dismissal. Job Turnover.

AB Labor market models in which job separations are a component typically produce the implication that the reason for a job separation (i.e., whether it is considered voluntary or not) is either immaterial in the determination of subsequent labor market experiences of the individual or has long-term stigmatizing repercussions. The model exposited in this paper is consistent with dismissals having real but transitory effects on the wage process of an individual. These effects constitute a punishment strategy pursued by the firm in order to induce optimal effort supplies on the part of its work force. Our empirical results indicate that the probability that a worker will face a punishment period due to an unlucky output draw is substantial. Moreover, it seems that the punishment period lasts for at least three years, a non-negligible amount of time. Further work is needed to resolve the issue of whether or not the effects of dismissal are indeed transitory or are better regarded as permanent.

Flood, Robert P.

TI Speculative Attacks and Models of Balance-of-Payments Crises. **AU** Agenor, Pierre-Richard; Bhandari, Jagdeep S.; Flood, Robert P.

TI Speculative Attacks and Models of Balance-of-Payments Crises. **AU** Agenor, Pierre-Richard; Bhandari, Jagdeep S.; Flood, Robert P.

Fogel, Robert W.

PD January 1992. **TI** Toward a New Synthesis on the Role of Economic Issues in the Political Realignment of the 1850's. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper on Historical Factors and Long-Run Growth: 34; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** N31, N11. **KW** Wages. Immigration. Early America. Political System.

AB After sketching various ways in which economic issues influenced the political realignment of the 1850's, the paper concentrates on five questions: 1) the timing of the economic issues and the disjunctions in economic developments across regions and classes; (2) the size of the nonagricultural male labor force of the North toward the end of the 1850's and the ethnic and residential distributions of these workers; 3) changes in the ethnic composition of the northern electorate and the sharp shift in the partisan affiliations of "Old Americans," especially between 1852 and 1860; 4) problems in measuring the ups and downs in the standard of living of northern nonagricultural workers between 1840 and 1860 and provisional estimates of the decline in their real wages between 1848 and 1855; 5) a provisional estimates of the excess supply of labor during 1854-1855 created by the unfortunate phasing of three cycles (the collapse of a long cycle in construction, the coincident trough of a relatively mild trade cycle, and the continued upswing of a long cycle in immigration.

Foreman-Peck, James

PD October 1991. **TI** The Efficiency Effects of Privatisation and Liberalisation: The Telecommunications Industry under State and Private Ownership. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 124; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL, ENGLAND. **PG** 22. **PR** 1 pound. **JE** L33, L96, D24. **KW** Privatization. Telecommunications. Productivity.

AB This paper supplements the little systematic empirical evidence available to gauge the success of the British privatization program. From a general model representing the changes in objectives and constraints entailed by the shift from the state industry regime, predictions are first derived of observed effects on price structure. Then estimates of changes in internal efficiency are obtained by two methods, total productivity analysis and econometric simulation. Both approaches suggest a substantial improvement because of the regime change.

Forsythe, Robert

PD November 1991. **TI** An Experiment on Coordination in Multi-Candidate Elections: The Importance of Polls and Election Histories. **AU** Forsythe, Robert; Myerson, Roger B.; 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: 962; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 17. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** D72, C91, D71. **KW** Voting Behavior. Social Choice. Experimental Economics. Polls. Elections.

AB Do polls simply measure intended voter behavior or can they affect it and, hence, change election outcomes? Do candidate ballot positions or the results of previous elections affect voter behavior? We conduct several series of experimental, three-candidate elections and use the data to provide answers to these questions. In these elections, we pay subjects conditionally on election outcomes to create electorates with publicly known preferences. A majority (but less than tow-thirds) of the voters are split in their preferences between two similar candidates, while a minority (but plurality) favor a third, dissimilar candidate. If all voters vote sincerely, the third candidate - a Condorcet loser - - would win the elections. We find that pre-election polls significantly reduce the frequency with which the Condorcet loser wins. Further, the winning candidate is usually the majority candidate who is listed first on the poll and election ballots. We review evidence given in an earlier paper which shows that a shared history enables majority voters to coordinate on one of their favored candidates in sequences of identical elections. With polls, majority-preferred candidates often alternated as election winners.

Foulides, Costas

TI On the Many Kinds of Growth. **AU** Eckstein, Zvi; Foulides, Costas; Kollintzas, Tryphon.

Frank, Richard G.

PD December 1991. **TI** Organizational Failure and Incentive Contracts in the Public Sector: Evidence from an Experiment in the Financing of Mental Health Care. **AU** Frank, Richard G.; Gaynor, Martin. **AA** Johns Hopkins University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3923; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $3.00. **JE** I11, I18, H71. **KW** Health Care. Government Subsidies. Medical Care. Public Health.

AB This paper makes use of a unique "natural experiment" in the design of intergovernmental grants. The State of Ohio has dramatically altered the method by which local public mental health care is financed. The manner in which the grant mechanisms has been altered allows for the estimation of *income compensated subsidy responses* of local governmental entities. The empirical results indicate strong responses to the "new" incentives suggesting a direction for policy-makers for dealing with some of the most vexing problems in mental health policy.

Frankel, Jeffrey A.

TI Are Option-Implied Forecasts of Exchange Rate Volatility Excessively Variable? **AU** Wei, Shang-Jin; Frankel, Jeffrey A.

Fratianni, Michele

PD January 1992. **TI** From EMS to EMU. **AU** Fratianni, Michele; Von Hagen, Jurgen; Waller, Christopher. **AA** Indiana University. **SR** Centre for Economic Policy Research Discussion Paper: 618; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 54. **PR** 3 Pounds ($5.00). **JE** F33, F42, E42, E58. **KW** European Monetary System. Monetary Union. Exchange Rate. Central Bank.

AB This paper discusses the strategic choices involved in the transformation of the current EMS into a European Monetary Union. Alternative strategy proposals are evaluated under the criteria of credibility, flexibility, effective institution-building and mitigation of end games. The Delors strategy mistakes exchange rate fixity for credibility, resulting in an overly rigid and unstable strategy. The Hard ECU provides flexibility, but is unlikely to achieve EMU. We propose a softened EMS, the Two-Tier EMS, as an alternative that meets the four criteria in a more satisfactory way. We use this model to show that the current draft of the statutes of the European Central Bank does not solve the dilemma of discretion and credibility in a satisfactory way.

Freeman, Richard B.

TI On the Labor Market Effects of Immigration and Trade. **AU** Borjas, George J.; Freeman, Richard B.; Katz, Lawrence F.

TI Changes in Earnings Differentials in the 1980's: Concordance, Convergence, Causes, and Consequences. **AU** Blackburn, McKinley L.; Bloom, David E.; Freeman, Richard B.

TI The Fall in Private Pension Coverage in the U.S. **AU** Bloom, David E.; Freeman, Richard B.

Freeman, Scott

PD October 1991. **TI** The Optimality of Nominal Contracts. **AU** Freeman, Scott; Tabellini, Guido. **AA** Freeman: University of Texas, Austin. Tabellini: University of California, Los Angeles. **SR** Centre for Economic Policy Research Discussion Paper: 602; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 25. **PR** 3 POUNDS ($5.00). **JE** G13, E31, E44, E13. **KW** Inflation. Prices. Contracts.

AB Why do we see nominal contracts in the presence of price level risk? To answer this question, this paper studies an overlapping generations model in which the equilibrium contract form is optimal, given the contracts elsewhere in the economy. Nominal contracts turn out to be optimal in the presence of aggregate price level risk under two circumstances. First, if individuals have the same constant degree of relative risk aversion, nominal contracts (eventually coupled with equity contracts) lead to optimal risk sharing. Second, nominal contracts can be optimal even if this condition is not met, if the repayment of contracts is subject to a binding cash-in-advance constraint. The reason for this is that a contingent contract, while reducing purchasing power risk, also increases the cash flow risk. Under a binding cash-in-advance constraint on the repayment of contracts, this second risk is costly, and it is minimized by a nominal contract. Finally, the paper also identifies some symmetry conditions under which nominal contracts are optimal even in the presence of relative price risk.

Frenkel, Jacob A.

TI Obstacles to Transforming Centrally-Planned Economies: The Role of Capital Markets. **AU** Calvo, Guillermo A.; Frenkel, Jacob A.

Friedman, Benjamin M.

PD December 1991. **TI** How Does it Matter? **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3929; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $3.00. **JE** E32, E63. **KW** Business Cycle. Monetary Policy. Fiscal Policy.

AB This paper argues that the distinctions among different current theories of the business cycle do not have the force usually assumed in their behalf in discussions of macroeconomic policy. The distinction between aggregate demand and aggregate supply as the principal location of the disturbances that drive business cycles - the distinction most popularly associated with "real business cycle" models -- is, from a policy perspective, less important than is commonly believed. The policy prescriptions that follow from these models have more to do with the kinds of assumptions that they incorporate about how markets function than with whether the chief disturbances to which the economy is subject to work through demand or supply. At the same time, a further set of distinctions not customarily addressed in the business cycle literature, mostly revolving around the definition of "income," turns out to be surprisingly important.

Friedman, James W.

PD February 1991. **TI** An Extension of the "Folk Theorem" with Continuous Reaction Functions. **AU** Friedman, James W.; Samuelson, Larry. **AA** University of North Carolina. **SR** University of North Carolina Working Paper Series: 91-1; Department of Economics, CB #3305, Gardner Hall, University of North Carolina, Chapel Hill, NC 27599-3305. **PG** not available. **PR** not available. **JE** C73, C71. **KW** Game Theory. Folk Theorem. Repeated Games.

AB In Friedman and Samuelson (1990), we showed that there exist subgame perfect equilibria for infinitely repeated games in which the equilibrium strategy combinations are continuous. This paper extends these results by providing a counterpart to the Fudenberg and Maskin folk theorem in continuous strategies. We show that any outcome of the stage game which is feasible and strictly individually rational can be supported as an outcome of a subgame perfect equilibrium of the infinitely repeated game with continuous strategies, providing discount factors are sufficiently high.

PD February 1991. **TI** Infinite Horizon Spatial Duopoly with Collusive Pricing and Noncollusive Location Choice. **AU** Friedman, James W.; Thisse, Jacques-Francois. **AA** University of North Carolina. **SR** University of North Carolina Working Paper Series: 91-2; Department of Economics, CB #3305, Gardner Hall, University of North Carolina, Chapel Hill, NC 27599-3305. **PG** not available. **PR** not available. **JE** C71, D43, L13, R32. **KW** Game Theory. Firm Location. Pricing. Spatial Equilibrium. Duopoly.
AB We investigate a spatial duopoly in which the firms simultaneously select locations at the beginning of time and, once chosen, the locations are fixed forever; however, the firms will choose prices in each of a countably infinite succession of time periods. We are interested in equilibrium behavior when the firms will collusively arrange a trigger strategy equilibrium in prices, and will select their locations knowing that a particular trigger strategy price equilibrium will ensue. Specifically, we restrict our attention to prices that support an outcome on the profit possibility frontier at which the ratio of firm 1's profits to those of firm 2 is positively related to the similar ratio of profits at the single shot noncooperative equilibrium. The unique resulting location equilibrium involves the pairing of firms at the market center.

PD February 1991. **TI** Continuous Reaction Functions in Duopolies. **AU** Friedman, James W.; Samuelson, Larry. **AA** University of North Carolina. **SR** University of North Carolina Working Paper Series: 91-3; Department of Economics, CB #3305, Gardner Hall, University of North Carolina, Chapel Hill, NC 27599-3305. **PG** not available. **PR** not available. **JE** C71, D43, L13. **KW** Game Theory. Reaction Functions. Repeated Games. Duopoly.
AB Friedman and Samuelson (1990) have recently shown that continuous reaction functions can support nontrivial outcomes as subgame perfect equilibria in repeated games. This paper examines continuous reaction functions in duopolies. We first establish a folk theorem, showing that any feasible, individually rational outcome in the stage game can be supported as a subgame perfect equilibrium outcome in continuous reaction functions (given sufficiently high discount factors). We then show that the set of discount factors for which outcomes can be supported by continuous reaction functions is at least as large as the corresponding sets under Nash reversion trigger strategies and optimal two-phase symmetric punishments. The implication of these findings is that no generality in terms of possible equilibrium outcomes need be sacrificed in the course of requiring continuity.

PD February 1991. **TI** Oligopoly with Price Inertia and Bounded Rationality. **AA** University of North Carolina. **SR** University of North Carolina Working Paper Series: 91-4; Department of Economics, CB #3305, Gardner Hall, University of North Carolina, Chapel Hill, NC 27599-3305. **PG** not available. **PR** not available. **JE** D43, L13, L14. **KW** Oligopoly. Reputation. Transactional Relationships.
AB In this paper an oligopoly model is developed in which the consumers show demand inertia and firms make decisions in a boundedly rational way. At any one time a consumer buys from one firm and has considerable loyalty to that particular firm. If the firm keeps its price constant from one period to the next, the probability that the consumer searches the market is low, but, if the firm changes its price, the probability of search rises markedly and rises more the greater the price change. Firms make price choices in each period attempting to maximize their current period profits assuming that the other firms will leave their prices unchanged. The purpose in modeling firm behavior in this seemingly naive way is that the decision process is very simple and avoids the need for peering into an uncertain future.

Fukao Kyoji

PD August 1990. **TI** International Trade and Investment under Different Rates of Time Preference. **AU** Fukao Kyoji; Hamada, Koichi. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 605; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 40. **PR** \$2.00. **JE** F21, F11. **KW** Capital Flows. Trade Theory. International Investment.
AB This paper attempts to integrate the theory of trade with that of capital movements, and to study the two country worlds where each nation has a different rate of time preference. It resolves the indeterminacy problem intrinsic in the Heckscher-Ohlin model where trade and factor movements coexist by assuming that capital movements are infinitesimally more costly than trade in goods. Under certain assumptions, one can dichotomize the behavior of asset accumulation from the dynamic pattern of trade specialization. Complete specialization will take place most likely in the country with a higher rate of time preference, which specializes into the more labor-intensive sector. It is shown that a single commodity model does exaggerate the amount of capital movements, but that the qualitative nature of asset accumulation patterns obtained in a single commodity model of capital movements holds intact in the model that incorporates trade. This paper offers another explanation to the Feldstein- Horioka paradox that domestic investment responds more closely to increasing savings than capital outflows do. If an economy is imperfectly specialized, increased savings will be absorbed in capital deepening rather than in capital outflow.

Fulghieri, Paolo

PD September 1991. **TI** Underpriced Initial Public Offers as a Multi-Product Investment House Strategy. **AU** Fulghieri, Paolo; Spiegel, Matthew. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-21; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 23. **PR** \$5.00 academic and non-profit institutions; \$6.00 corporations (add \$1.00 for foreign requests). **JE** G14, G24, G12. **KW** Investment Banking. Stock Market. Stock Offers.
AB Most of the existing literature explains the underpricing of new equity issues as part of a strategy for maximizing the issuers' welfare. Little role is left for the underwriter. In contrast, the model developed in this paper focuses on the role of the underwriter and his customer base. As a result, we provide a theory of how investment firms distribute new issues to their customers. Underwriters do not operate in a vacuum. Rather they are engaged in relationships with large groups of clients. If investment houses are of different quality, they might find it optimal to underprice IPOs as a signaling device to their general customer base to promote future business. We find that the total dollar value (rather than percentage value) of underpricing by high quality investment firms is higher than for low quality ones. We also show that multiproduct firms may use the signal to cross subsidize their customers. That is a group of

customers for whom signaling would not occur in a single product company, may become recipients of valuable signals in a multiproduct firm. Finally, we find that, all else equal, larger customers and those with more elastic demand functions receive more valuable signals from the high quality investment houses.

Gagnon, Joseph E.

PD January 1992. **TI** How Pervasive is the Product Cycle? The Empirical Dynamics of American and Japanese Trade Flows. **AU** Gagnon, Joseph E.; Rose, Andrew K. **AA** Gagnon: Federal Reserve Board. Rose: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3946; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F11, F14. **KW** International Trade. Product Market.

AB This paper looks for dynamic patterns in international trade flows using comprehensive multilateral American and Japanese data disaggregated to the four-digit SITC level. Little evidence is found of product cycle dynamics between 1962 and 1988. Rather, goods that begin the sample in surplus (deficit) almost always remain in surplus (deficit) throughout the sample.

PD January, 1992. **TI** How Pervasive is the Product Cycle? The Empirical Dynamics of American and Japanese Trade Flows. **AU** Gagnon, Joseph E.; Rose, Andrew K. **AA** Gagnon: Federal Reserve Board. Rose: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3946; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 17. **PR** $3.00. **JE** F14, F32. **KW** International Trade. Product Cycles. Trade Surplus.

AB This paper looks for dynamic patterns in international trade flows using comprehensive multilateral American and Japanese data disaggregated to the four-digit SITC level. Little evidence is found of product cycle dynamics between 1962 and 1988. Rather, goods that begin the sample in surplus (deficit) almost always remain in surplus (deficit) throughout the sample.

Gandal, Neil

PD December 1991. **TI** Disadvantageous Semicollusion. **AU** Gandal, Neil; Fershtman, Chaim. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 37-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 15. **PR** no charge. **JE** L13, L11, D43. **KW** Collusion. Price Competition. Competition. Pricing. Oligopoly.

AB Standard analysis in industrial organization indicates that firms earn higher profits if they collude rather than compete on prices (or quantities) However, firms choose other strategic variables, such as investment in capacity or R&D, in addition to choosing prices or production levels. Thus the overall evaluation of product market collusion must take into account its effect on the interaction in the other dimensions. This paper demonstrates that collusion in the product market may yield lower overall profits because it intensifies competition in the other dimensions of the interaction.

Gately, Dermot

PD October 1991. **TI** Imperfect Price-Reversibility of U.S. Gasoline Demand: Asymmetric Responses to Price Increases and Declines. **AA** New York University. **SR** New York University Economic Research Reports: 91-55; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 27. **PR** no charge. **JE** Q41, Q43, E31. **KW** Energy. Oil. Prices.

AB This paper describes a framework for analyzing the imperfect price-reversibility ("hysteresis") of oil demand. The oil demand reductions following the oil price increases of the 1970's will not be completely reversed by the price cuts of the 1980's, nor is it necessarily true that these partial demand reversals themselves will be reversed exactly by future price increases. We decompose price into three monotonic series: price increases to maximum historic levels, price cuts, and price recoveries (increases below historic highs). We would expect that the response to price cuts would be no greater than to price recoveries, which in turn would be no greater than for increases in maximum historic price. For evidence of imperfect price-reversibility, we test econometrically the following U.S. data: vehicle miles per driver, the fuel efficiency of the automobile fleet, gasoline demand per driver. In each case, our econometric results allow us to reject the hypothesis of perfect price reversibility. The data show smaller response to price cuts than to price increases. This has dramatic implications for projections of gasoline and oil demand, especially under low price assumptions.

Gaynor, Martin

TI Organizational Failure and Incentive Contracts in the Public Sector: Evidence from an Experiment in the Financing of Mental Health Care. **AU** Frank, Richard G.; Gaynor, Martin.

Gertler, Mark

PD November 1991. **TI** Corporate Financial Policy, Taxation, and Macroeconomic Risk. **AU** Gertler, Mark; Hubbard, R. Glenn. **AA** Gertler: New York University and National Bureau of Economic Research. Hubbard: Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3902; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** $3.00. **JE** G32, G31, G35. **KW** Leverage. Capital Structure. Corporation. Corporate Policy. Corporate Debt.

AB This paper develops a simple model of corporate financial structure intended to formalize the macroeconomic concern over excessive leverage. In particular, we attempt to rationalize why firms designing an optimal capital structure would choose a level of debt that leaves them heavily exposed to macroeconomic risk. Our starting point is a variant of the "corporate control" model often used to motivate debt as the optimal financial contract. We modify this framework in two ways. First, we include common risks, interpretable as business cycle risks, as well as idiosyncratic risks. Second, we include corporate and investor-level taxes, and consider the implications of a net tax bias against equity finance. Our model leads to the prediction that individual firm dividends may vary with macroeconomic conditions, even after controlling for the effects of relevant firm-specific performance measures, such as earnings. We present some formal econometric evidence in support of this prediction, using a panel of individual corporations. Evidence on some related predictions is also presented.

PD November 1991. **TI** Monetary Policy, Business Cycles and the Behavior of Small Manufacturing Firms. **AU** Gertler, Mark; Gilchrist, Simon. **AA** Gertler: New York University and National Bureau of Economic Research. Gilchrist: Federal Reserve Board. **SR** National Bureau of Economic Research Working Paper: 3892; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E44, E52, E32, L16, L60. **KW** Monetary Policy. Manufacturing. Business Cycle. Credit Markets. Money Supply.
AB We present evidence on the cyclical behavior of small versus large manufacturing firms, and on the response of the two classes of firms to monetary policy. Our goal is to take a step toward quantifying the role of credit market imperfections in the business cycle and in the monetary transmission mechanism. We find that, following tight money, small firms sales decline at a faster pace than large firm sales for a period of more than two years. Further, bank lending to small firms contracts, while it actually rises for large firms. Monetary policy indicators tied to the performance of banking, such as M2, have relatively greater predictive power for small firms than for large. Finally, small firms are more sensitive than are large to lagged movements in GNP. Considering that small firms overall are a non-trivial component of the economy, we interpret these results as suggestive of the macroeconomic relevance of credit market imperfections.

Gertner, Robert

TI Anatomy of Financial Distress: An Examination of Junk-Bond Issuers. **AU** Asquith, Paul; Gertner, Robert; Scharfstein, David.

Gibbons, Robert

PD July 1991. **TI** Optimal Incentive Contracts in the Presence of Career Concerns: Theory and Evidence. **AU** Gibbons, Robert; Murphy, Kevin J. **AA** Gibbons: Cornell University and National Bureau of Economic Research. Murphy: Harvard University. **SR** National Bureau of Economic Research Working Paper: 3792; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** M12, J41, J33, J31. **KW** Compensation. Corporations. Business Administration. Personnel Management.
AB This paper studies career concerns - concerns about the effects of current performance on future compensation - and describes how optimal incentive contracts are affected when career concerns are taken into account. Career concerns arise frequently: they occur whenever the market uses a worker's current output to update its belief about the worker's ability and competition then forces future wages (or wage contracts) to reflect these updated beliefs. Career concerns are stronger when a worker is further from retirement, because a longer prospective career increases the return to changing the market's belief. In the presence of career concerns, the optimal compensation contract optimizes total incentives.

Gifford, Sharon

PD December 1991. **TI** A Model of Project Evaluation with Limited Resources. **AU** Gifford, Sharon; Wilson, Charles. **AA** Gifford: Rutgers University. Wilson: New York University. **SR** New York University Economic Research Reports: 91-64; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 17. **PR** no charge. **JE** O22, M11, L52, O32. **KW** Project Analysis. Managerial Economics. Innovation.
AB This paper characterizes the optimal policy for a model in which the manager may adopt an endogenous number of projects but has only limited resources to devote to their evaluation and maintenance. In any period, the manager may discard any subset of existing projects but may evaluate only one existing or one new project which is then either discarded or restored. Both its current return and the probability with which a project may be restored depends only on the number of periods since its last evaluation. For a manger whose objective is to maximize the sum of discounted returns, the optimal policy takes one of two forms. A "discard" policy specifies that the manager evaluate a new project in each period and discard current projects at some critical age. An "age inspection" policy specifies that the manager evaluate a new project only if all projects are sufficiently young.

Gilchrist, Simon

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

Giovannini, Alberto

PD October 1991. **TI** The Currency Reform as the Last Stage of Economic and Monetary Union: Some Policy Questions. **AA** Columbia University. **SR** Centre for Economic Policy Research Discussion Paper: 591; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 13. **PR** 3 Pounds ($5.00). **JE** E42, F33, F36. **KW** Currency. Monetary Union. Exchange Rate. Monetary Reform.
AB The paper discusses the policy problems involved in replacing several national currencies with a single currency in a monetary union. While these problems are of general interest, the analysis is motivated by the plan for Economic and Monetary Union among the members of the European Community. The issues discussed include the choice of conversion rates and the effects of exchange rate devaluations at the time of the monetary reform.

PD November 1991. **TI** The Currency Reform as the Last Stage of Economic and Monetary Union: Some Policy Questions. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3917; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 13. **PR** $3.00. **JE** F33, F31, E42, F36. **KW** Exchange Rate. European Community. Monetary Union. Monetary Reform. Currency.
AB The paper discusses the policy problems of a project aimed at substituting several national currencies with one single currency. While these problems are of general interest, the analysis is motivated by the plan for Economic and Monetary Union among the members of the European Community. The issues discussed include the choice of conversion rates and the effects of exchange-rate devaluations at the time of the monetary reform.

TI Estimating Expected Exchange Rates under Target

Zones. **AU** Chen, Zhaohui; Giovannini, Alberto.

PD February 1992. **TI** Bretton Woods and its Precursors: Rules Versus Discretion in the History of International Monetary Regimes. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4001; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F33, N22, N24, E42, E52. **KW** Exchange Rates. Monetary Policy. Gold Standard. Monetary Regimes.

AB In recent years, the theory of rules and discretion in monetary policy has fascinated scores of academic economists and policy-makers alike. This paper asks whether it can be applied to understand the history of the world monetary system, by focusing on the setup and the experience of the Bretton Woods regime, and comparing it with its predecessors, in particular the classical gold standard. The paper first discusses the underpinnings, and some of the problems, of a theory of the evolution of the international monetary regime based on alternating rules and discretion. It then assesses the ability of such theories to explain the historical record. It first reviews the rules that characterized the classical gold standard, and the motivations to return to gold in the interwar period. Then it evaluates the British and U.S. plans for world monetary reform published in 1943, and the IMF Articles of Agreement. Finally, the paper analyzes the data on interest rates and exchange rates during the classical gold standard and the Bretton Woods period to assess the stabilizing properties of the two exchange rate regimes.

Glaeser, Edward L.

PD July 1991. **TI** Growth in Cities. **AU** Glaeser, Edward L.; Kallal, Hedi D.; Scheinkman, Jose A.; Shleifer, Andrei. **AA** Glaeser and Kallal: National Bureau of Economic Research. Scheinkman: University of Chicago. Shleifer: Harvard University. **SR** National Bureau of Economic Research Working Paper: 3787; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O13, L11, O18. **KW** Technological Change. Employment. Urban Growth. Economic Development.

AB Recent theories of economic growth, including Romer (1986), Porter (1989) and Jacobs (1969), have stressed the role of technological spillovers in generating growth. Because such knowledge spillovers are particularly effective in cities, where communication between people is more extensive, data on the growth of industries in different cities allows us to test some of these theories. Using a new data set on the growth of large industries in 170 U.S. cities between 1956 and 1987, we find that local competition and urban variety, but not regional specialization, encourage employment growth in industries. The evidence suggests that important knowledge spillovers might be between, rather than within industries, consistent with the theories of Jacobs (1969).

Goetzmann, William N.

PD November 1991. **TI** Clustering Methods and Commercial Rents. **AU** Goetzmann, William N.; Wachter, Susan. **AA** Goetzmann: Columbia University. Wachter: University of Pennsylvania. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-22; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 15. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** R34, R32. **KW** Urban Economics. Real Estate.

AB A clustering algorithm is applied to asking and effective rents for 21 metropolitan U.S. office markets. It provides support for the conjecture that there exist a few major "families" of cities; including an oil and gas group, an industrial Northeast group and a high technology group. We investigate the robustness of the algorithms to short data series and to the influence of outlying observations. The results provide a guideline for the further application of cluster analysis to real estate data.

Gokey, Timothy C.

PD October 1991. **TI** Characterizing the Risk Premium in Foreign Exchange Returns. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 118; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL, ENGLAND. **PG** 26. **PR** 1 pound. **JE** F31, G15. **KW** Exchange Rate. Risk Premium. Forward Market. Forecasting.

AB We propose a new decomposition of forward and spot exchange rates which allows us to 1) estimate and compare the variance of the risk premium and expected change in the spot rate, 2) quantify the degree of correlation between them, 3) estimate the variance of the unobservable forecast error, and 4) investigate the hypothesis that inefficiency in the forward market could by itself account for the data. We also show that, under not uninteresting assumptions, the serial correlation of the risk premium approximates that of the forward premium and that the risk premium is strongly correlated with deviations from purchasing power parity (PPP). This latter fact helps to explain the correlation between the risk premium and expected changes in spot exchange rates.

Gokhale, Jagadeesh

TI Social Security and Medicare Policy from the Perspective of Generational Accounting. **AU** Auerbach, Alan J.; Gokhale, Jagadeesh; Kotlikoff, Laurence J.

Gomulka, Stanislaw

PD October 1991. **TI** Polish Economic Reform: Principles, Policies and Surprises. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 51; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 29. **PR** no charge. **JE** E63, E65, E58, E42, E61. **KW** Stabilization Policy. Poland. Economic Reform. Monetary Policy. Exchange Rate.

AB The principal novelty of this paper lies in offering explanations of changing priorities and of the stop-go-stop sequence of policies in Poland in the years 1990-1991. The paper suggests that, in the first year of the reform, achieving price stability was secondary to the following three other aims: a substantial increase of international reserves (large-up-front devaluation required), a drastic reduction of the share of dollar currency in the total money supply (large monetary expansion required) and a major improvement of the quality of the price system (drastic increases of some administrative prices needed). It is shown that money supply was effectively the only nominal anchor in the first year of the reform, and that the exchange rate and the incomes policy became nominal anchors only in the second year of the reform. The paper also discusses the causes of the budget crisis in 1991 and the relationship between the quality of macroeconomic control and the pace of structural change.

Good, David H.

PD December 1991. **TI** The Structure of Production, Technical Change and Efficiency in a Multiproduct Industry: An Application to U.S. Airlines. **AU** Good, David H.; Nadiri, M. Ishaq; Sickles, Robin C. **AA** Good: Indiana University. Nadiri: New York University and National Bureau of Economic Research. Sickles: Rice University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3939; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** $3.00. **JE** L51, L93. **KW** Deregulation. Transportation. Technological Change. Productivity.

AB In this paper we construct a short-run model of the firm describing the behavior of thirteen U.S. airlines during the difficult transition to deregulation. Several modeling scenarios are developed to assess three common assumptions in cost studies: the use of time as a proxy for technological change as opposed to a more thorough description of changes in the production technique, the assumption of cost minimizing behavior as opposed to permitting allocative inefficiency in input selection, and the assumption of exogeneity of output and capital and their characteristics as opposed to endogenous decisions regarding these variables. Derived properties of the resulting eight combinations of these issues are calculated to identify the sensitivity of these properties to the modeling assumptions. The most dramatic finding is that input concavity is reduced by 80 percent by relaxing the assumption of cost minimization. Demand and substitution elasticities are nearly twice as large under our most flexible compared to the least flexible scenarios.

Gora, Marek

PD October 1991. **TI** Flow and Stock Analysis of Polish Unemployment: January 1990-June 1991. **AU** Gora, Marek; Lehmann, Hartmut. **AA** Gora: Warsaw School of Economics and London School of Economics. Lehmann: London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 52; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 36. **PR** no charge. **JE** E24, E65, O15, O52. **KW** Unemployment. Economic Reform. Poland. Market Transformation.

AB Unemployment is and will be for the foreseeable future one of the major issues of economies in transition. Not only is unemployment in Post-communist economies a socially explosive problem, what happens on the unemployment front allows us to also make inferences about the state of the transition process in general. In this paper we look at Polish unemployment as it evolved from January 1990 to June 1991. A framework is developed which allows us to discuss flows into and out of unemployment. In analyzing the determinants of the various flows we discuss the macroeconomic environment brought about by the reforms and the role of prices and wages. However, we, above all, stress institutional and structural factors which have an impact on labor flows in the Polish Post-communist economy. The stocks of several variables are also analyzed. We relate the trends of some unemployment stocks (especially the stocks of school leavers and group layoffs) to the trend of the overall stock of unemployment. We also look at the trends of vacancies and of various U/V ratios and touch upon the short-run and long-run trends of employment by sector. The main conclusion of the paper is that the high level of unemployment in Poland is neither due to the elimination of hidden unemployment (it actually increased in 1990!) nor a result of restructuring. The level of unemployment is high because of large inflows from outside the labor force and because hirings have been much smaller than in previous years while separations have only been slightly higher.

Gordon, Robert J.

PD January 1992. **TI** Measuring the Aggregate Price Level: Implications for Economic Performance and Policy. **AA** Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3969; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** D24, C43, E23, E31. **KW** Productivity Growth. Price Indices. Prices.

AB Inaccurate measures of the aggregate price level may distort short-run policy decisions and may produce misleading comparisons of productivity growth across decades and among nations. This paper serves a dual purpose of reviewing compactly the vast American literature on price and output measurement, and of identifying special aspects of American methods which affect international comparisons of inflation and output. The traditional problem of substitution bias in the Consumer Price Index (CPI) is of minor importance compared with the bias introduced by new products, changes in the quality of existing products, and outlet substitution bias. The quality bias for U.S. consumer durables has recently been estimated to be roughly 1.5 percent per year for the postwar period, and roughly 3 percent per year for consumer durables. The only available study of outlet substitution bias estimates a 2 percent annual rate for food in the 1980's. Cross-country differences in measurement methods tend to overstate the recent productivity performance of U.S. relative to European manufacturing, with an understatement for U.S. non-manufacturing. Both European and U.S. manufacturing performance are probably understated relative to Japan, which seems to do the best job of incorporating new products and correcting for quality change of high tech goods.

PD February 1992. **TI** Forward into the Past: Productivity Retrogression in the Electric Generating Industry. **AA** Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3988; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** L94, Q41, O33. **KW** Productivity. Technological Change. Environmental Regulation. Electric Utilities.

AB The electric utility industry is a prime culprit in the U.S. productivity growth slowdown of the last two decades. This paper develops econometric labor and fuel demand equations for a large panel data set covering almost all fossil-fueled electric generating capacity over the period 1947-87. Labor productivity and fuel efficiency both advanced rapidly until the late 1960's and then both reversed direction, deteriorating substantially, particularly for newly constructed plants. The research goes beyond econometric estimation by conducting a set of telephone interviews with plant managers of establishments that registered particularly high or low productivity. The interviews reveal many variables and relations that are omitted in conventional econometric studies of production. They support the view that the productivity reversal originated in the manufacturing industry that produces electric generating equipment: after decades of increased scale, temperature, and pressure, a "technological frontier" was reached in which new large plants developed unanticipated maintenance problems requiring substantial additions of maintenance employees. Environmental regulations also contributed to the productivity reversal but were secondary in importance to the technological barriers. Overall, the study supports the "depletion hypothesis" previously advanced to explain the productivity slowdown.

Gordon, Stephen F.

PD October 1991. **TI** Dynamic Factor Demand and Value Function Methods. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9114; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 34. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** D24, E23, L60, E22. **KW** Manufacturing. Production.

AB This paper extends the applicability of Epstein's (1981) value function method of modeling dynamic factor demand to cases in which firms form non-static expectations over a finite planning period. If expected prices are not expected to change after the end of the planning horizon, then the duality between production functions and value functions--along with Bellman's Equation--can be used to transform the producer's problem from one with an infinite horizon to one with a finite horizon. This allows the analyst to provide exact solutions to the producer's problem without resorting to numerical approximations. The paper also tests to see if the regularity conditions imposed by the duality theorem are consistent with data taken from the U.S. manufacturing sector. Exact posterior probabilities for the restrictions are provided by using Monte Carlo methods to integrate the posterior distribution over the region of the parameter space consistent with the regularity conditions.

Greenfield, Robert L.

PD January 1992. **TI** Gresham's Law Regained. **AU** Greenfield, Robert L.; Rockoff, Hugh. **AA** Greenfield: Fairleigh Dickinson University. Rockoff: Rutgers University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper on Historical Factors and Long-Run Growth: 35; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** N21, N11. **KW** Currency. Financial System.

AB It has been argued that Gresham's Law, bad money (money with a low value in non-monetary uses) drives out good, often fails because one money can circulate at its market value. Various cases involving the U.S. dollar in the nineteenth century have been cited as possible violations of the law resulting from non-par circulation of the dollar. This paper analyzes these cases, and finds to the contrary that a "93 percent version" of Gresham's law held in all them. Evidently, there were high transactions costs associated with using good money at a premium or bad money at a discount.

Greenhalgh, Christine

PD October 1991. **TI** Workforce Training in the Thatcher Era - Market Forces and Market Failures. **AU** Greenhalgh, Christine; Mavrotas, George. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 120; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL, ENGLAND. **PG** 19. **PR** 1 pound. **JE** J31, J62, J24. **KW** Occupational Choice. Vocational Training. Labor Mobility. Employment.

AB The paper begins with a summary of changing employment patterns. We next document the rising incidence of vocational training for the economically active adult workforce, using data from successful Labor Force Surveys. Training incident rose sharply in the period of labor market slack of the early 1980's and continued to rise rapidly in the second half of the decade. By 1989 women's training rates overtook those recorded for males. Short spells of training dominated the rise which was particularly fast for people in professional and technical jobs. Although traded goods and services increased their rates, non-traded goods (mainly public sector) remained top of the league. Finally, we consider the issue of positive externalities arising from worker mobility. In the mid-1980's mobility was depressed, but it rose rapidly thereafter, creating disincentives for employer provision of longer training spells leading to certified qualifications. The paper concludes with a brief discussion of training policy.

PD October 1991. **TI** Job Training, New Technology and Labour Turnover. **AU** Greenhalgh, Christine; Mavrotas, George. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 121; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford Ox1 3UL, ENGLAND. **PG** 16. **PR** 1 pound. **JE** J24, J63, J62, O33. **KW** Occupational Choice. Labor Mobility. Turnover. R&D. Vocational Training.

AB Vocational training incidence for those at work is frequently financed partly or wholly by employers, who then lose part of their investment return if workers migrate to other firms. We investigate the incidence of training and the incidence of job-to-job mobility for a large sample of British workers in 1984 and 1989. We also analyze the role of new technology in influencing patterns of both training and interfirm mobility. The results show that technology leads to more training for men in R&D intensive sectors, but less in innovation adopting sectors; in contrast women are more likely to be training if innovation is rapid. Mobility falls slightly as sectors undertake more R&D or raise their rate of adopting new technology. Our results also confirms earlier studies in demonstrating that job-to-job mobility is highest for the young and higher for those with formal higher education qualifications than for the unskilled. These are also characteristics which engender a higher training propensity, so unavoidably private gains to training for employers are below social gains for these young people. Public sector workers have higher training rates and lower mobility; this perhaps explains the lack of perception of the problem by successive governments.

Greenwood, Jeremy

PD February 1991. **TI** Tax Analysis in a Real Business Cycle Model: On Measuring Harberger Triangles and Okun Gaps. **AU** Greenwood, Jeremy; Huffman, Gregory W. **AA** Greenwood: University of Western Ontario and Federal Reserve Bank of Minneapolis. Huffman: University of Western Ontario and University of California, Riverside.

SR University of Western Ontario Department of Economics Research Report: 9103; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 35. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** E31, E13, E62. **KW** Business Cycle. Fiscal Policy. Taxation. Taxes.

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

PD May 1991. **TI** The Allocation of Capital and Time over the Business Cycle. **AU** Greenwood, Jeremy; Hercowitz, Zvi. **AA** Greenwood: University of Western Ontario and Federal Reserve Bank of Minneapolis. Hercowitz: Tel Aviv University and Institute for Empirical Macroeconomics. **SR** University of Western Ontario Department of Economics Research Report: 9104; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 39. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** D13, E13, J22, E22, E17. **KW** Households. Macroeconomic Model. Labor Supply. Capital. Household Production.

AB A Beckerian model of household production is developed to study the cyclical allocation of capital and time between market and home activities. The adopted framework treats the business and household sectors symmetrically. In the market, labor interacts with business capital to produce market goods and services, and likewise at home the remaining time (leisure) is combined with household capital to produce home goods and services. The model presented is parameterized and simulated to see whether it can rationalize the observed allocation of capital and time, as well as other stylized facts, for the postwar U.S. economy.

Gregg, Paul

PD August 1991. **TI** Signals and Cycles: Productivity Growth and Changes in Union Status in British Companies, 1984-1989. **AU** Gregg, Paul; Machin, Stephen; Metcalf, David. **AA** Gregg: National Institute of Economic and Social Research. Machin: University College London. Metcalf: London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 49; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 25. **PR** no charge. **JE** J51, J53, J24. **KW** Unions. Labor Productivity. England. Productivity Growth.

AB Productivity growth in 329 companies (total employment = 1.96 million workers) is analyzed for the period 1984-89. The study breaks new ground by (i) analyzing the impact of changes in union status on productivity growth; (ii) examining the impact of interactions among product market and industrial relations variables on companies' productivity changes; (iii) including companies in the service sector as well as in manufacturing. The results suggest no difference in productivity growth between union and non-union companies over the years 1984-7. But in 1988 and 1989 unionized companies experienced faster productivity growth than their non-union counterparts. This wedge in productivity growth over non-union companies was twice as large in companies where there had been a diminution in union status compared with companies where union status was unchanged. The results probably reflect both the "signal" that mangement has (re-)asserted its prerogatives and "cycles" in union effects shaped by the intertemporal behavior of the economic cycle.

Grossman, Gene M.

PD November 1991. **TI** Environmental Impacts of a North American Free Trade Agreement. **AU** Grossman, Gene M.; Krueger, Alan B. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3914; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $3.00. **JE** Q25, Q28, F13, F14, O19. **KW** Air Pollution. Trade Barriers. Economic Growth. Trade Policy. Pollution Abatement.

AB A reduction in trade barriers generally will affect the environment by expanding the scale of economic activity, by altering the composition of economic activity, and by bringing about a change in the techniques of production. We present empirical evidence to assess the relative magnitudes of these three effects as they apply to further trade liberalization in Mexico. In Section 1, we use comparable measures of three air pollutants in a cross-section of urban areas located in 42 countries to study the relationship between air quality and economic growth. We find for two pollutants (sulfur dioxide and "smoke") that concentrations increase with per capita GDP at low levels of national income, but decrease with GDP growth at higher levels of income. Section 2 studies the determinants of the industry pattern of U.S. imports from Mexico and of value added by Mexico's maquiladora sector. We investigate whether the size of pollution abatement costs in the U.S. industry influences the pattern of international trade and investment. Finally, in Section 3, we use the results from a computable general equilibrium model to study the likely compositional effect of a NAFTA on pollution in Mexico.

TI Asset Bubbles and Endogenous Growth. **AU** Yanagawa, Noriyuki; Grossman, Gene M.

Guidotti, Pablo E.

PD December 1991. **TI** Dollarization in Latin America: Gresham's Law in Reverse? **AU** Guidotti, Pablo E.; Rodriguez, Carlos A. **AA** Guidotti: International Monetary Fund. Rodriguez: Centro de Estudios Macroeconomicos de Argentina. **SR** International Monetary Fund Working Paper: WP/91/117; International Monetary Fund, Washington, DC 20431. **PG** 18. **PR** not available. **JE** F31, E31, O54, E41, F41. **KW** Inflation. Latin America. Currency. Exchange Rate.

AB Since the 1970's, a number of high-inflation Latin American countries have experienced a persistent process of "dollarization." To interpret some of the stylized facts, this paper presents a simple model in which dollarization reflects the fact that there are costs involved in switching the currency denomination of transactions. The transaction costs of dollarization define a band for the inflation differential within which there will be no incentive to switch between currencies. Above the upper value of the band, the local currency gradually disappears as the economy becomes fully dollarized; below the lower value, de-dollarization occurs.

Gustman, Alan L.

PD November 1991. **TI** Pension COLAs. **AU** Gustman, Alan L.; Steinmeier, Thomas L. **AA** Gustman: Dartmouth College and National Bureau of Economic Research. Steinmeier: Texas Tech University. **SR** National Bureau of Economic Research Working Paper: 3908; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 46. **PR** $3.00. **JE** G23, J14. **KW** Pensions. Retirement. Inflation.

AB This paper studies cost of living adjustments in pensions from the perspective of labor economics. Evidence from longitudinal data on pension and annuity incomes of retirees suggests that pension COLAs are less important in the 1980's than in the 1970's, but that through 1987 they continued to cover about half of cost of living increases. Data from a longitudinal sample of pension benefit formula and COLA provisions collected by the Wyatt Company for the fifty largest industrial companies indicate that if the 1968-78 decade persisted, cost of living adjustments would increase basic pension benefits for retirees by a half; while if the inflation experience were that of the 1978-88 period, pension COLAs would raise the present value of pensions by only fourteen percent. Simulation analysis allows an examination of the effects of pension COLA provisions on the key incentives emphasized in the pension literature, incentives affecting the retirement, turnover and shirking decisions. Pension COLAs are found to have very small effects on these incentives. Finally a simulation analysis demonstrates that when the contribution side of COLAs is taken into account, pension COLAs do not necessarily dampen the variation among generations in real incomes realized under alternative inflation shocks.

Haldrup, Niels

PD November 1991. **TI** A Note on the Dickey-Fuller Regression with a Maintained Trend. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-30; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 9. **PR** no charge. **JE** C12, C22, C15. **KW** Times Series Model. Unit Roots. Dickey-Fuller Test. Trends. Asymptotic Theory.

AB The purpose of this note is to call attention to distributional results that seem to have been neglected when focusing on the Dickey-Fuller regression with a maintained time trend. We prove that the distribution of the trend t-statistic will be the mirror image of the usual Dickey-Fuller distribution when the process contains a drift. It is also argued that by subtracing the mean of the trend regressor, tests concerning the intercept term will be inconsistent.

PD November 1991. **TI** Multivariate Regression Models with I(2)-Variables. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-31; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 34. **PR** no charge. **JE** C12, C22, C15. **KW** Time Series Model. Asymptotic Theory. Unit Roots. Cointegration.

AB In this paper issues concerning multivariate analysis on nonstationary time series with double unit roots is addressed. From a rather general model with I(1) and I(2) variables, possibly with maintained deterministic components, diverse specializations will be derived. We analyze conditions under which standard Gaussian inference can be conducted and the existing literature on spurious regressions is extended to models with I(2) variables. The analysis helps describing how the Dickey-Fuller class of tests for non-cointegration is affected when both I(1) and I(2) variables may enter the system. One possibility arising when variables are I(2) is that cointegrating vectors may be polynomials in the large operator as both levels and the differences of the series may enter the cointegrating vectors. In an empirical example of money demand in the U.K., residual based testing for polynomial cointegration is illustrated and general error correction models that involve proportional, integral and derivative control mechanisms are estimated.

Hall, Bronwyn H.

PD July 1991. **TI** Corporate Restructuring and Investment Horizons. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3794; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G34, G32, G31. **KW** Business Investment. Corporations. Capital Structure.

AB The recent wave of corporate restructuring in the United States has been accused of shortening the investment horizons of U.S. managers. This paper surveys the empirical and case study evidence on restructuring and investment behavior and reaches the following conclusions: 1) A large fraction of the restructurings were motivated by synergistic or other efficiency-enhancing reasons and have little to do with investment horizons. 2) However massive shifts toward debt in the capital structure of manufacturing firms, often induced by hostile takeover threats, are accompanied by reduced investment of all kinds, particularly in a few industries which are characterized by "stable" technology and cost-based innovative strategies. 3) The evidence is consistent with optimizing behavior on the part of firms faced with a lower relative price of debt to equity and a higher overall cost of capital during the 1980's, but there are still doubts about whether the U.S. market for corporate control elicits the correct level of long run investment.

PD January 1992. **TI** Exploring the Relationship Between R&D and Productivity in French Manufacturing Firms. **AU** Hall, Bronwyn H.; Mairesse, Jacques. **AA** Hall: University of California, Berkeley and National Bureau of Economic Research. Mairesse: ENSAE-CREST and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3956; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O32, O47, L60. **KW** Manufacturing. Technological Change. Productivity Growth.

AB This paper uses a newly available data set on the R&D performance of individual French manufacturing firms for the 1980's to replicate and update a series of studies on French R&D and productivity growth at the firm level during the 1970's. The focus of the paper is on the use of a single data set to evaluate the robustness of the methods commonly used to measure the private returns to R&D. We investigate the consequences of varying specifications and estimations, and in particular that of using different measures of R&D (knowledge) capital and of double counting corrections.

Halpern, Laszlo

PD February 1992. **TI** Export Supply and Import Demand in Hungary (An Econometric Analysis for 1968-1989). **AU** Halpern, Laszlo; Szekely, Istvan P. **AA** Halpern: Institute of Economics of the Hungarian Academy of Science. Szekely: Budapest University of Economics. **SR** Centre for Economic Policy Research Discussion Paper: 620; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 22. **PR** 3.00 pounds or $5.00. **JE** F14. **KW** Exports. Supply Function. Import Demand. Hungary.

AB This paper investigates two behavioral relations for the Hungarian economy, which are vital for formulating future economic policy packages: the export supply and the import demand functions. The specifications of the equations, based on well-known functions of economic theory, take into account the characteristics of the special regulatory environment for enterprises throughout the period (1968-1989). Special attention is paid to export and import subsidies and to import restrictions. As a result of subsidies, the implicit deflators (price indices) derived from national accounts statistics can be misleading and lead to the misspecification of econometric equations. By taking into account the special regulatory environment, in particular subsidies and restrictions, the present analysis identifies stable and well-defined behavioral relations.

Ham, John C.

PD November 1991. **TI** Estimating the Effect of Training on Employment and Unemployment Durations: Evidence from Experimental Data. **AU** Ham, John C.; LaLonde, Robert J. **AA** Ham: University of Pittsburgh and University of Toronto. LaLonde: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3912; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 34. **PR** $3.00. **JE** J64, J24, H53, I38. **KW** Unemployment. Job Training. Experimental Economics. Welfare Programs.

AB Using data from a social experiment, we estimate the impact of training on the duration of employment and unemployment spells for AFDC recipients. Although an experimental design eliminates the need to construct a comparison group for this analysis, simple comparisons between the average durations or the transition rates of treatments' and controls' employment and unemployment spells lead to biased estimates of the effects of training. We present and implement several econometric approaches that demonstrate the importance of and correct for these biases. For the training program studied in the paper, we find that it raised employment rates because employment durations increased. In contrast, training did not lead to shorter unemployment spells.

Hamada, Koichi

TI International Trade and Investment under Different Rates of Time Preference. **AU** Fukao Kyoji; Hamada, Koichi.

Hamermesh, Daniel S.

TI Sex Discrimination by Sex: Voting in a Professional Society. **AU** Dillingham, Alan E.; Ferber, Marianne A.; Hamermesh, Daniel S.

TI Sex Discrimination by Sex: Voting in a Professional Society. **AU** Dillingham, Alan E.; Ferber, Marianne A.; Hamermesh, Daniel S.

PD November 1991. **TI** Labor Demand: What Do We Know? What Don't We Know? **AA** Michigan State University. **SR** National Bureau of Economic Research Working Paper: 3890 ; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J23, J21. **KW** Labor Demand. Employment. Adjustment Costs.

AB This study reviews empirical research on the demand for labor. The static analysis discusses the production parameters describing homogeneous labor and labor disaggregated along various criteria; the distinction between workers and hours; the importance of job dynamics; and the nature of a variety of policies that affect the long-run demand for labor. Issues in the dynamics of demand for workers and hours, including speeds of adjustment for homogeneous and heterogeneous labor, asymmetries, and the nature of adjustment costs are presented. The paper emphasizes how the paucity of appropriate data has limited our ability to obtain reliable estimates of the underlying concepts.

PD December 1991. **TI** The Appointment-Book Problem and Commitment, with Applications to Refereeing and Medicine. **AA** Michigan State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3928; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** D21, D45, D23. **KW** Queues. Firm Behavior. Industrial Organization.

AB Markets that involve customers waiting for services or goods in queues whose length they cannot observe are studied. In these markets suppliers truncate queues that become so long that they jeopardize the supplier's future relations with the customer. The length of the queue and the probability of truncation increase with the quality of the supplier, and this implicitly defines the price that customers are willing to pay for quality. Queue-jumping or nontruncation can occur if monetary payments are made or if nonmonetary specific commitments exist between a customer and a supplier. The predictions apply to any activity where the queue is unobservable and transactions costs make contracts or spot pricing uneconomic. The theory is examined on a random sample of refereeing request by seven economics journals. Quality, measured by experience and citations to the referee's work, lengthens the queue and increases the probability of truncation. Monetary bribes affect queue discipline in the expected way; and specific commitments, measured by past publication in the journal and location at the editor's institution, greatly affect the truncation rate, but have no impact on the rate of servicing the queue. The implications for truncation are also examined n a set of data describing doctor's willingness to accept new patient's, ith much the same results as in the sample of referees.

Hammour, Mohamad L.

TI The Cleansing Effect of Recessions. **AU** Caballero, Ricardo J.; Hammour, Mohamad L.

Haque, Nadeem U.

PD October 1991. **TI** An Empirical "Dependent Economy" Model for Pakistan. **AU** Haque, Nadeem U.; Husain, Aasim M.; Montiel, Peter J. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/102; International Monetary Fund, Washington, DC 20431. **PG** 24. **PR** not available. **JE** O11, O53, E22, E62. **KW** Investment. Inflation. Economic Growth. Developing Countries.

AB While the "dependent economy" approach has been used extensively in theoretical work on developing countries, there is very little empirical analysis of it available in the literature. This paper specifies a dependent economy model which incorporates several developing country features, including an explicit role for public investment and legal interest rate ceilings. The model is estimated for Pakistan and is used to analyze the country's recent high growth-low inflation experience. In particular, the contribution that external inflows, in the form of workers' remittances and concessional lending, may have made in generating this outcome is assessed.

Hardy, Daniel C.

PD October 1991. **TI** Soft Budget Constraints, Firm Commitments and the Social Safety Net. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/98; International Monetary Fund, Washington, DC 20431. **PG** 17. **PR** not available. **JE** D78, H32, P26. **KW** Regulation. Bankruptcy. Socialism. Socialist Enterprise.

AB It is shown that the inefficiencies created by the "soft" budget constraint, enjoyed by enterprises in Eastern Europe and elsewhere, will continue so long as governments are unable credibly to threaten not to bail out loss-makers. Commitment to a "hard" budget constraint can best be achieved by the institution of a suitable social safety net. The burden on the social safety net can be reduced by the (endogenous) development of financial markets.

Harley, C. Knick

PD June 1991. **TI** The Antebellum American Tariff: Food Exports and Manufacturing. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9105; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 41. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** N61, N11. **KW** Tariff. Exports. Protectionism. Manufacturing. Industrialization.

AB The American antebellum tariff provided high levels of protection to most of American manufacturing. Yet most economic historians have concluded that the tariff had modest effect on American industrialization in part because of terms of trade improvements arising from America's dominance as a raw cotton exporter. A computational general equilibrium analysis contradicts these conclusions. The tariff had no important terms of trade effects because America's marginal export was food not cotton. Furthermore, appropriate modeling of the competition between imports and domestic production shows that much of American manufacturing depended on tariff protection.

Harris, David

PD December 1991. **TI** Income Shifting in U.S. Multinational Corporations. **AU** Harris, David; Slemrod, Joel; Yeung, Bernard; Morck, Randall. **AA** Harris, Slemrod and Yeung: University of Michigan, Ann Arbor. Morck: University of Alberta. **SR** National Bureau of Economic Research Working Paper: 3924; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F23, H25, L60, H26. **KW** Corporate Taxation. Manufacturing. Multinationals. Tax Evasion.

AB It is often claimed that multinational firms avoid taxes by shifting income from high tax to low tax countries. Using a five year panel of data for two hundred large U.S. manufacturing firms, we find that U.S. tax liability, as a fraction either of U.S. sales or U.S. assets, is related to the location of foreign subsidiaries in a way that is consistent with tax-motivated income shifting. Having a subsidiary in a tax haven, Ireland, or one of the "four dragon" Asian countries - all characterized by low tax rates - is associated with lower U.S. tax ratios. Having a subsidiary in a high tax region is associated with higher U.S. tax ratios. These results suggest that U.S. manufacturing companies shift income out of high tax countries into the U.S., and from the U.S. to low tax countries. Such behavior certainly lowers worldwide tax liabilities for larger U.S. manufacturing companies and appears to significantly lower their U.S. tax liabilities as well.

Hart, Oliver

PD November 1991. **TI** A Theory of Debt Based on the Inalienability of Human Capital. **AU** Hart, Oliver; Moore, John. **AA** Hart: Massachusetts Institute of Technology and National Bureau of Economic Research. Moore: London School of Economics. **SR** National Bureau of Economic Research Working Paper: 3906; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 47. **PR** $3.00. **JE** G12, E22, G31, G32. **KW** Investment. Private Debt. Human Capital. Asset Pricing.

AB Consider an entrepreneur who needs to raise funds from an investor but cannot commit not to withdraw his human capital from the project. The possibility of a default or quit puts an upper bound on the total future indebtedness from the entrepreneur to the investor at any date. We characterize the optimal repayment path and show how it is affected both by the maturity structure of the project return stream and by the durability and specificity of project assets. Our results are consistent with the conventional wisdom about what determines the maturity structure of (long-term) debt contracts.

Hassett, Kevin

TI Taxation and Foreign Direct Investment in the United States: A Reconsideration of the Evidence. **AU** Auerbach, Alan J.; Hassett, Kevin.

Haurin, Donald

PD December 1991. **TI** Local House Price Indexes: 1982-1991. **AU** Haurin, Donald; Hendershott, Patric; Kim, Dongwook. **AA** Ohio State University. **SR** National Bureau of Economic Research Working Paper: 3933; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 14. **PR** $3.00. **JE** R31, R21. **KW** Housing. Migration. Prices. Urban Economics.

AB We begin with a description of three house price panel data sets for the period 1982 to 1991. Next, we estimate a model that assumes the three sources are derived from an underlying unobserved price series, and we construct composite indexes that report house prices for 135 locations. These series can be used either as explanatory variables in studies of household formation, housing demand, and migration or to test models of the determinants of spatial and intertemporal variations in house prices. Finally, we construct regional series (based, alternatively, on census and Salomon Brothers regions) and two national aggregates and describe their movements. Our series are compared to other local, regional, and national series.

Hay, Donald

PD October 1991. **TI** Investment in Inventories: An Empirical Microeconomic Model of Firm Behaviour. **AU** Hay, Donald; Louri, Helen. **AA** Hay: University of Oxford. Louri: Athens University of Economics and Business. **SR** Oxford Applied Economics Discussion Paper: 123; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL, ENGLAND. **PG** 13. **PR** 1 pound. **JE** E22, L23, D21. **KW** Investment. Inventories.

AB Inventory investment is one part of a decision nexus addressed by the firm including physical investment, finance and trade credit. The analysis presented in the paper makes this explicit, drawing on portfolio theory to model balance sheet items. The model is tested for samples of U.K. quoted companies for the period 1960-85, and is shown to perform better than standard stock-adjustment equations. The equations indicate different behavioral responses between a sample of large growth-oriented companies, and a sample of smaller stable companies. There is also evidence that large company behavior changed in the turbulent economic conditions of the 1970's.

Heckman, James J.

PD July 1991. **TI** Randomization and Social Policy Evaluation. **AA** University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 107; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** H43. **KW** Program Evaluation. Project Evaluation.

AB This paper considers the recent case for randomized social experimentation and contrasts it with older cases for social experimentation. The recent case eschews behavioral models, assumes that certain mean differences in outcomes are the parameters of interest to evaluators and assumes that randomization does not disrupt the social program being analyzed. Conditions under which program disruption effects are of no consequence are presented. Even in the absence of randomization bias, ideal experimental data cannot estimate median (other quantile) differences between treated and untreated persons without involving supplementary statistical assumptions. The recent case for randomized experimentation does not address the choice of the appropriate stage in a multistage program at which randomization should be conducted. Evidence on randomization bias is presented.

PD November 1991. **TI** Continuous Versus Episodic Change: The Impact of Civil Rights Policy on the Economic Status of Blacks. **AU** Heckman, James J.; Donohue, John. **AA** Heckman: University of Chicago and National Bureau of Economic Research. Donohue: American Bar Foundation and Northwestern University. **SR** National Bureau of Economic Research Working Paper: 3894; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 36. **PR** $3.00. **JE** J15, J78, J71, J31, D31. **KW** Minorities. Government Policy. Education. Income Distribution. Migration.

AB This paper examines the available evidence on the causes of black economic advance in order to assess the contribution of federal policy. Over the period 1920-1990, there were only two periods of relative black economic improvement - during the 1940's and in the decade following the passage of the Civil Rights Act of 1964, the Voting Rights Act of 1965, and the institution of the government contracts compliance program. Black migration from the South, a traditional source of economic gains for blacks, almost stopped at about this same time, and recent evidence on the impact of black schooling gains indicates that educational gains cannot explain the magnitude of black economic progress beginning in the mid-1960's.

Helliwell, John F.

PD January 1992. **TI** Convergence and Growth Linkages between North and South. **AU** Helliwell, John F.; Chung, Alan. **AA** Helliwell: Harvard University and National Bureau of Economic Research. Chung: University of British Columbia. **SR** National Bureau of Economic Research Working Paper: 3948; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F43, F01, F02. **KW** Convergence Hypothesis. Economic Growth. Open Economy.

AB Using cross-sectional data for 98 countries for 1960-85, this paper shows that growth of per capita GDP depends negatively on initial income levels, as implied by the convergence hypothesis, as well as on international differences in investment rates in physical and human capital. There is some evidence of slight economies of scale (1.06) among industrial countries. The evidence in favor of the convergence hypothesis is strongest for the countries of the OECD and Latin America, and weakest for Asia. Growth in Latin America and Africa is lower than elsewhere even after allowing for international differences in initial income levels, scale, schooling, and capital investment. Analysis of Solow residuals for the OECD countries (for which capital stock data are available) shows convergence in rates of technical progress, suggesting that convergence of per capita GDPs is not just a function of differences in investment rates. The linkage between per capita GDP and the real exchange rate is found to be strong for the OECD and Asia, weak for Africa and negative for Latin America.

Hendershott, Patric

TI Local House Price Indexes: 1982-1991. **AU** Haurin, Donald; Hendershott, Patric; Kim, Dongwook.

Henderson, Rebecca

TI Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations. **AU** Jaffe, Adam B.; Trajtenberg, Manuel; Henderson, Rebecca.

Hercowitz, Zvi

TI The Allocation of Capital and Time over the Business Cycle. **AU** Greenwood, Jeremy; Hercowitz, Zvi.

Hicks, Ronald

PD November 1991. **TI** Assessing the Impact of Structural Adjustment on the Poor: The Case of Malawi. **AU** Hicks, Ronald; Brekk, Odd Per. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/112; International Monetary Fund, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E64, I38, O15, O55, I32. **KW** Price Policy. Welfare Programs. Agriculture.

AB This paper applies, through a case study on Malawi, a simple methodology indicating the first-round (i.e., price) effects of macroeconomic policies on real earnings of the poor. As the economic program in Malawi has not involved substantial exchange rate action or cuts in subsidies, the real incomes of the poor have been most clearly affected by the pricing policies of the agricultural parastatal and the overall anti-inflationary measures incorporated in the program; developments in minimum wages have also been important. The study suggests that, on balance, these various factors have led to an increase in real incomes of the poor over the program period.

Hines, James R., Jr

PD December 1991. **TI** On the Sensitivity of R&D to Delicate Tax Changes: The Behavior of U.S. Multinationals in the 1980s. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3920; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 41. **PR** $3.00. **JE** H25, H22, O32, F23. **KW** Tax Policy. Tax Reform. R&D. Multinational Firms.

AB This paper explores the effect of recent U.S. tax changes on the R&D activities of American multinational corporations. Prior to 1986, U.S. multinational firms could deduct all of their domestic R&D expenses against their U.S. income for tax purposes. After 1986, some firms could take only a partial deduction (while other multinationals continued to receive the benefits of 100% deductibility). By comparing the behavior of firms in these two situations (after 1986), it is possible to estimate the responsiveness of R&D to changes in after-tax prices. The results indicate that the price elasticity of demand for R&D lies between - 1.2 and -1.6, thereby implying considerably more price sensitivity than is typically assumed to be true of R&D. Based on these results, the 1986 tax change appears to have been responsible for a reduction of between $1.4 billion and $2.2 billion in annual R&D in the United States, in return for $1.2 billion in additional annual tax revenue.

Hirshleifer, Jack

PD October 1991. **TI** Disaster and Recovery. **AA** University of California, Los Angeles. **SR** University of California at Los Angeles Department of Economics Working Paper: 639; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 10. **PR** $2.50; checks payable to U.C. Regents. **JE** F02, H31, H56. **KW** Disasters. War. Revolution.

AB Although largely unexamined by economists, disasters are natural economic experiments. In community-wide ("middle-scale") disasters like floods or bombing raids, the problems are mainly technological and distributive: e.g., coping with resource scarcities and arranging fair compensation. Historical experience has shown that, in such disasters, individual and group behavior is mainly adaptive. Survivors help one another, and aid flows in from the outside. In society-wide ("large-scale") disasters like destructive wars and revolutions, however, the survival of the social order itself may come into question. The key problem here is the maintenance or restoration of the money-mediated division of labor, failure being frequently evidenced by a movement of population from the cities closer to sources of food in the countryside. For middle-scale disasters, the main policy issues concern the extent of government aid and its form, given that such interventions may subvert the adaptive efforts of private parties. Society-wide disasters are themselves typically due to massive government malfunctions (property confiscations, unrealistic price controls, monetary mismanagement), and recovery generally depends upon restoration of property rights and the market system.

Hodrick, Robert J.

TI Characterizing Predictable Components in Excess Returns on Equity and Foreign Exchange Markets. **AU** Bekaert, Geert; Hodrick, Robert J.

PD July 1991. **TI** Dividend Yields and Expected Stock Returns: Alternative Procedures for Inference and Measurement. **AA** Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Paper: 108; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G13, G35, G14. **KW** Dividends. Stock Market. Stock Returns.

AB Alternative ways of conducting inference and measurement for long horizon forecasting are explored with an application to dividend yields as predictors of stock returns. Monte Carlo analysis indicates that the Hansen and Hodrick (1980) procedure is biased at long horizons, but the alternatives perform better. These include an estimator derived under the null hypothesis as in Richardson and Smith (1989), a reformulation of the regression as in Jegadeesh (1990), and a vector autoregression (VAR) as in Campbell and Schiller (1988), Kandel and Stambaugh (1988), and Campbell (1991). The statistical properties of long horizon statistics generated from the VAR indicate interesting patterns in expected stock returns.

TI Characterizing Predictable Components in Excess Returns on Equity and Foreign Exchange Markets. **AU** Bekaert, Geert; Hodrick, Robert J.

Hopenhayn, Hugo A.

PD August 1989. **TI** A Dynamic Stochastic Model of Entry and Exit to an Industry. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1057; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 55. **PR** not available. **JE** L11. **KW** Market Structure. Firm Size.

AB This paper develops and analyzes a dynamic stochastic model for a competitive industry which endogenously determines processes for entry and exit and for individual firms output and employment. The concept of stationary equilibrium is introduced, extending long run industry equilibrium theory to account for entry, exit and heterogeneity in the size and growth rate of firms. Conditions under which there will be entry and exit in the stationary equilibrium are given. Cross sectional properties across size and age cohorts are analyzed and compared to the data. In connection to this the implications of different stochastic orderings are considered. Implications for the equilibrium distributions of profits and the value of firms are analyzed.

Howitt, Peter

TI Growth and Unemployment. **AU** Aghion, Philippe; Howitt, Peter.

Hubbard, R. Glenn

PD July 1991. **TI** Long-Term Contracting and Multiple-Price Systems. **AU** Hubbard, R. Glenn; Weiner, Robert J. **AA** Hubbard: Columbia University and National Bureau of Economic Research Weiner: Brandeis University. **SR** National Bureau of Economic Research Working Paper: 3782; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** L61, L14. **KW** Contracts. Product Markets. Industrial Organization.

AB This paper examines product markets in which long-term contracts and spot transactions coexist. Such markets are characterized by "multiple-price systems," wherein adjustment to supply and demand shocks occurs through spot prices, while contract prices are fixed, or adjust slowly. We derive the existence of contracts, as well as the equilibrium fraction of spot trade, in the framework of an optimizing model, and analyze the effects of shocks on market equilibrium when some buyers and sellers are "locked in" contractually. The model is employed to interpret the change in the copper market from a multiple-price system to one characterized solely by spot trade.

TI Corporate Financial Policy, Taxation, and Macroeconomic Risk. **AU** Gertler, Mark; Hubbard, R. Glenn.

Huffman, Gregory W.

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

PD July 1991. **TI** The Role of Transaction Volume in Producing Information about Asset Prices. **AA** University of Western Ontario and University of California, Riverside. **SR** University of Western Ontario Department of Economics Research Report: 9106; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 29. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** G12, G14. **KW** Capital Market. Asset Pricing.

AB A dynamic equilibrium model is constructed in which agents with access to different information sets participate in the capital market. Agents must then use the equilibrium price of capital to make forecasts of the return to holding capital, and these forecasts must be consistent with Bayes' rule. The information structure is important because agent's consumption-investment decisions depend upon the expected return to holding capital. In equilibrium the price of capital reflects all the information available to the least informed agents in the economy. The differential information structure motivates some agents to buy or sell capital. It is shown by way of example that the volume of trade, as well as the change in the price of capital can be highly correlated with a measure of the information content of prices. This measure of information is the difference between the unconditional entropy of the dividend and the entropy of the dividend conditional on observing the price of capital. This helps give content to the view that changes in the price of capital and the volume of capital traded convey information about market fundamentals.

Hughes Hallett, Andrew J.

PD February 1992. **TI** East Germany, West Germany, and their Mezzogiorno Problem: An Empirical Investigation. **AU** Hughes Hallett, Andrew J.; Ma, Yue. **AA** University of Strathclyde. **SR** Centre for Economic Policy Research Discussion Paper: 623; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 48. **PR** 3.00 pounds or $5.00. **JE** F36, E62, E24, E31. **KW** Monetary Union. Fiscal Policy. Germany.

AB Economic and monetary reunification in Germany has proved to be more expensive than previously thought - and not just for the Germans. If a "Mezzogiorno" problem of continuing fiscal transfers to the East and possible migration flows westwards are to be avoided, there must be convergence in productivity levels. This paper analyzes possible convergence paths and the policy regimes which accelerate convergence. The intention is to illustrate the (albeit less extreme) problems facing a European monetary union of asymmetric and incompletely converged economies. Working from first principles, or with the aid of an econometric model, shows that convergence sufficient to avoid a "Mezzogiorno" problem is likely to be slow: perhaps 30-40 years in the German case despite very fast growth in the East. Second, it is not clear that the process is incentive compatible: a substantial part of the servicing and subsidizing costs must be paid by other (non-German) economies in the union without any obvious compensating benefits. Third, to reduce the need for continuing transfers actually requires a policy which promotes price and wage flexibility in the depressed region.

Huizinga, Harry

TI Bank Exposure, Capital and Secondary Market Discounts on Developing Country Debt. **AU** Ozler, Sule; Huizinga, Harry.

Hulten, Charles R.

PD January 1992. **TI** What is Productivity: Capacity or Welfare Measurement? **AA** University of Maryland, College Park and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3970; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O47, O33. **KW** Technological Change. Economic Growth. National Wealth.

AB A number of recent papers have examined the role of environmental variables in accounting for economic growth, and have concluded that net measures of national product are superior to gross measures in portraying the outcome of the growth process. This paper argues that the two measures are not substitutes but complements which reveal different aspects of economic growth: gross product is the output concept for getting at the welfare consequences of economic growth. It is then shown that this capacity-welfare nexus is mirrored in the Hicksian and Harrodian definitions of technical change. An alternative to the conventional Solow growth accounting framework is presented in which the change in national wealth is decomposed into components corresponding to labor input and the Harrodian rate of technical change.

PD January 1992. **TI** Growth Accounting when Technical Change is Embodied in Capital. **AA** University of Maryland, College Park and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3971; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O33, O47, D24. **KW** Factor Productivity. Technological Change. Manufacturing.

Productivity Growth.
AB Many technological innovations are introduced through improvements in the design of new investment goods, thus raising the possibility that capital-embodied technical change may be a significant source of total factor productivity growth. There are, however, no systematic estimates of the size of the embodiment effect. This paper attempts to fill this gap by merging the estimates of quality change obtained from the price literature on quality change with a version of the conventional sources of growth model which allows for both embodied and disembodied technical change. The resulting estimates suggest that as much as 20 percent of the total factor productivity growth in the U.S. manufacturing industry over the period 1943-83 is due to the embodiment effect. It is also found that for the equipment used in U.S. manufacturing, best practice technology may be as much as 23 percent above the average level of technical efficiency.

Hung, Victor T. Y.

TI Money and Growth. **AU** Blackburn, Keith; Hung, Victor T. Y.

Husain, Aasim M.

TI An Empirical "Dependent Economy" Model for Pakistan. **AU** Haque, Nadeem U.; Husain, Aasim M.; Montiel, Peter J.

Imbens, Guido W.

TI Sources of Identifying Information in Evaluation Models. **AU** Angrist, Joshua D.; Imbens, Guido W.

TI Identification and Estimation of Local Average Treatment Effects. **AU** Angrist, Joshua D.; Imbens, Guido W.

Ingram, Peter

PD August 1991. **TI** Strike Incidence and Duration in British Manufacturing Industry in the 1980's. **AU** Ingram, Peter; Metcalf, David; Wadsworth, Jonathan. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 48; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 53. **PR** no charge. **JE** J51, J52, L60. **KW** Strike Duration. Wages. Manufacturing. Unions. Bargaining.
AB Around 1-in-40 wage settlements involved a strike in British manufacturing during the 1980's. The average strike duration was 12 days. Data kindly made available by the CBI are used to analyze strike incidence, duration and pay changes for some 7000 settlements at the level of the bargaining group. Numerous new findings are reported. For example multi-unionism in a workplace is associated with higher strike incidence and durations than single unionism. And the changes in industrial relations laws during the 1980's are associated with reduced strike incidence and duration. Various strike theories are examined and the evidence suggests than one version of the asymmetric information theory of strikes - that unions know their own strength but that the firm does not have this information - has much to commend it.

Inman, Robert P.

PD December 1991. **TI** Fiscal Federalism in Europe: Lessons From the United States Experience. **AU** Inman, Robert P.; Rubinfeld, Daniel L. **AA** Inman: University of Pennsylvania and National Bureau of Economic Research. Rubinfeld: University of California, Berkeley. **SR** National Bureau of Economic Research Working Paper: 3941; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 12. **PR** $3.00. **JE** E62, F41, E63. **KW** Fiscal Policy. Decentralization. Policy Cycles.
AB The existing political and legal institutions of fiscal policy-making are under challenge. As the United States and the eastern European and Soviet states experiment with policy decentralization, the states of western Europe are looking to a more centralized policy structure via the E.E.C. This paper seeks to raise issues of importance to all such reform efforts, notably, the need to consider, and balance, the inefficiencies of fiscal policy decentralization (spillovers and wasteful fiscal competition) against the inefficiencies of fiscal policy centralization (policy cycles and localized "pork barrel" spending and taxes). The need to develop new fiscal policy institutions emphasizing voluntary agreements and responsive "agenda-setters" is stressed.

Isard, Peter

TI Establishing Incentive Structures and Planning Agencies that Support Market-Oriented Transformations. **AU** Dooley, Michael P.; Isard, Peter.

Ito, Takatoshi

TI Do Bulls and Bears Move across the Borders? International Transmission of Stock Returns and Volatility as the World Turns. **AU** Lin, Wen-Ling; Engle, Robert F.; Ito, Takatoshi.

Jacklin, Charles J.

PD August 1988. **TI** Going Public. **AU** Jacklin, Charles J.; Robbins, Edward Henry. **AA** Jacklin: Stanford University. Robbins: University of Hawaii. **SR** Stanford Graduate School of Business Research Paper: 1055; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 51. **PR** not available. **JE** G12, G14. **KW** Public Offerings. Stock Market. Asset Pricing.
AB One explanation for the empirically observed underpricing of new issues is the existence of an adverse selection problem faced by uninformed investors in the presence of informed investors. Rather than excluding informed investors from initial public offerings (IPOs), we show that, if share allocation rules are set properly, then the existence of informed investors may reduce underpricing by making credible threats that, in oversubscribed offerings, allocations to the uninformed will be small unless uninformed demand levels are high. Unlike earlier models, we provide a rationale for the intermediary role played by investment bankers in IPOs. Their knowledge of the primary market participants can enhance the revenue raised by the issuer.

PD September 1989. **TI** Demand Equity and Deposit Insurance. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1062; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 28. **PR** not available. **JE** G21, G28. **KW** Demand Deposits. Deposit Insurance. Banking.
AB The services provided by the liability side of banking are examined in an economy in which everyone is identical ex ante and banks are uninsured. Demand equity deposit claims are shown to provide all the service that can be provided by demand debt claims without the risk of banking panics as long

as there is not both aggregate uncertainty about liquidity demands and asymmetry of information about the quality of bank assets. Demand debt claims are conjectured to have evolved because both these conditions were met historically. Given the rapid development of financial market, these conditions may no longer hold and thus demand equity claims may offer a viable alternative to government-insured demand debt claims. With demand equity claims, only insurance against fraud need be provided to insure a safe deposit system.

Jackman, Richard

PD July 1991. **TI** Regional Wage Determination in Great Britain. **AU** Jackman, Richard; Savouri, Savvas. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 47; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 80. **PR** no charge. **JE** E24, E25, J31. **KW** Unemployment. Wage Determination. Wages. Labor Market.

AB This paper investigates the determinants of regional wages in Britain using annual data from the New Earnings Survey over the period 1974-1989. Separate wage equations are estimated for male and female workers, for manuals and non-manuals and for manufacturing industry as against non-manufacturing. The main conclusions are that local labor market conditions (as measured by the regional unemployment rate) have a significant impact on wages only in the case of manual men. In the case of these workers we find that the relationship between wages and unemployment is best fitted by a double logarithmic form, which in turn implies that a 10 per cent reduction in the variance of male manual unemployment rates across regions could be associated with a 5 per cent fall in the average unemployment rate of this group. Differences in the wage rates of non-manual men and women across regions appear to have more to do with differences in the cost-of-living (and especially house prices) suggesting that the labor market for these groups is national rather than local in character.

Jacquillat, Bertrand

PD November 1991. **TI** A Quasi Process Free Valuation Model of Floating Rate Instruments Theory and Instruments. **AU** Jacquillat, Bertrand; de Laguiche, Sylvie. **AA** Bertrand: Stanford University and Universite Paris Dauphine. de Laguiche: Associes en Finance. **SR** Stanford Hoover Institute Working Paper in Economics: E-91-10; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 38. **PR** not available. **JE** G13, E43. **KW** Term Structure. Interest Rate. Contingent Pricing.

AB In this paper, floating rate instruments are priced in the general framework of stochastic models of the term structure of interest rates. The random cash flows paid by a floating rate instrument are estimated with the forward risk adjusted probability corresponding to their payment date. An approximation using forward rates is worked out. It gives a pricing method which only requires the computation of a zero coupon yield curve and does not depend on the choice of a stochastic model.

Jaffe, Adam B.

PD February 1992. **TI** Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations. **AU** Jaffe, Adam B.; Trajtenberg, Manuel; Henderson, Rebecca. **AA** Jaffe: Harvard University and National Bureau of Economic Research. Trajtenberg: Tel Aviv University and National Bureau of Economic Research. Henderson: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3993; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O31. **KW** Technological Change. Innovation. Patents. Technology Spillover.

AB We compare the geographic location of patent citations to those of the cited patents, as evidence of the extent to which knowledge spillovers are geographically localized. We find that citations to the U.S. patents are more likely to come from the U.S., and more likely to come from the same state and SMSA as the cited patents than one would expect based only on the pre-existing concentration of related research activity. These effects are particularly significant at the local (SMSA) level, and are particularly apparent in early citations.

Jappelli, Tullio

TI Information Sharing in Credit Markets. **AU** Pagano, Marco; Jappelli, Tullio.

Jensen, Henrik

PD September 1991. **TI** One Advantage of Leadership in a Fixed Exchange Rate System. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-23; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 6. **PR** no charge. **JE** E61, F42, F31. **KW** Exchange Rate. Inflation. Monetary Policy. Policy Coordination.

AB Contrary to a standard conclusion in game theoretic literature on policy-making, we demonstrate that it pays to be leader in a fixed exchange rate system, as credibility problems with the private sector are more easily resolved in a repeated game.

PD September 1991. **TI** The "Counterproductivity of International Monetary Policy Cooperation" Revisited. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-24; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 23. **PR** no charge. **JE** E52, F42, J51, F41. **KW** Unions. Monetary Policy. Policy Coordination. Exchange Rate.

AB We reconsider a standard two country monetary policy game with fixed nominal wage contracts. The policy regime is either noncooperative or cooperative. We extend conventional analysis by deriving the natural rate of employment endogenously through monopoly union decision-making. As unions (unsuccessfully) attempt to affect the real exchange rate, real wages are inefficiently high. The attempts are strongest under monetary cooperation, as unions perceive a steeper labor demand curve under that regime. This accounts for lower employment, and, in effect, higher consumer price inflation. Thus, international monetary cooperation is counterproductive.

PD September 1991. **TI** Uncertainty in Interdependent Economies with Monopoly Unions. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-25; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK.

PG 30. **PR** no charge. **JE** E52, F42, J51, F41. **KW** Policy Coordination. Inflation. Unions. Monetary Policy.
AB We demonstrate that cooperative monetary stabilization policies need not be advantageous when interdependent economies are subject to symmetric shocks. In comparison with noncooperative policies, inflation becomes more uncertain under cooperation. When monopoly unions hedge against more inflation uncertainty by increasing real wages, average employment (inflation) decreases (increases). Such stagflationary properties are therefore most likely to materialize when policies are performed cooperatively. If shocks are asymmetric, results are opposing, and cooperation may be advantageous. However, cooperation with a fixed nominal exchange rate target is, under mild assumptions, the most likely scene for stagflation when disturbances are asymmetric.

Jepsen, Gunnar Thorlund

PD August 1991. **TI** Wage Contracts and Design of Tax Enforcement Policy in the Shadow Economy. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-21; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 24. **PR** no charge. **JE** H26, O17. **KW** Tax Policy. Shadow Economy. Tax Evasion.
AB Tax evasion is widespread. This paper presents a simple model with wage contracting in the shadow economy where the traditional notions of the market are ill-defined. It is shown that it is possible - but costly - to reduce the illegal work by an adequate enforcement policy, if the agents are risk averse. One conclusion is that the only feasible way of eliminating the shadow economy in this sector is through a tax reform based on a direct expenditure tax.

Johnson, Paul

PD May 1990. **TI** TAXBEN2: The New IFS Tax Benefit Model. **AU** Johnson, Paul; Stark, Graham; Webb, Steven. **AA** Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/5; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 40. **PR** 3 pounds. **JE** C81, C88, E62. **KW** Taxes. Computer Modeling.
AB The paper describes the way in which the IFS tax and benefit model works. It describes the data set and the way it is used and adapted, the structure of the program in some detail, and the output of which the model is capable.

Johnson, Paul A.

TI Local Versus Global Convergence across National Economies. **AU** Durlauf, Steven N.; Johnson, Paul A.

Johnston, Mark

PD July 1991. **TI** The Australian Pharmaceutical Subsidy Gambit: Transmuting Deadweight Loss and Oligopoly Rents to Consumer Surplus. **AU** Johnston, Mark; Zeckhauser, Richard. **AA** Johnston: Department of Community Services and Health, Australia. Zeckhauser: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3783; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** L65, H51, L52. **KW** Subsidies. Drugs. Consumer Surplus. Government Policy. Australia.
AB Australia pays less than other developed nations for her pharmaceuticals, about 45% as much as the United States. She achieves this result with an ingenious price-contingent subsidy scheme, which turns deadweight loss (due to pricing above marginal cost) into consumer surplus. Pharmaceutical companies are offered a per unit subsidy from the government for selling their product at marginal cost in the Australian market. The subsidy is calibrated to enable the companies to recover what they would otherwise receive in monopoly profits. When two or more firms possess market power for a particular therapeutic use, the subsidy scheme creates a game - in effect a race - to determine who joins first and reaps most of the benefits. Properly constructed, the game transfers significant oligopoly profits to the consumer. Australia's success - she reaps benefits equal to 15% of its drug expenditures - stems in part from her small size and geographic isolation. She can free ride on drug research, and can work her scheme almost without notice.

Joshi, Heather

PD January 1992. **TI** Child Care and Mothers' Lifetime Earnings: Some European Contrasts. **AU** Joshi, Heather; Davies, Hugh. **AA** Joshi: London School of Hygiene and Tropical Medicine. Davies: Birkbeck College. **SR** Centre for Economic Policy Research Discussion Paper: 600; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 32. **PR** 3 Pounds ($5.00). **JE** J13, J22, O57. **KW** Child Care. Female Labor Supply. Europe. Earnings.
AB Patterns of female employment participation are compared in a variety of European countries with differing levels of child care provision The earnings foregone over a lifetime by a woman bearing children (compared with the earnings of her childless counterpart) are simulated for four countries, using estimated parameters for the effects of participation, hours worked and wages. Western Germany and the United Kingdom each have larger earnings "losses" than France and Sweden, where there is also more out-of-home-provision for children of and below school age. The effect on mothers' lifetime earnings of various hypothetical extensions of child care in the U.K. is simulated.

Jovanovic, Boyan

TI An Optimal Constitution in a Stochastic Environment. **AU** Barbosa, A. S. Pinto; Jovanovic, Boyan.

PD December 1991. **TI** Coordination and Spillovers. **AA** New York University and University of Pennsylvania. **SR** New York University Economic Research Reports: 91-65; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 27. **PR** no charge. **JE** E13, E23. **KW** Production. Macroeconomic Model.
AB In a model with positive productive spillovers I estimate the production losses caused by the agents' inability to match perfectly with one another. When there are positive spillovers to physical or human capital, when agents differ in their endowments of such capital, and when trading coordination is imperfect, the market sector will tend to be larger than optimal, and market participation should be taxed. Surprisingly, a perfectly coordinated economy in which agents' locations reflect the nature of the spillovers can yield a level of GNP up to nine times as large as an economy in which agents locate at random. The estimates are rough, but the bottom line is clear: Coordination makes a big difference to per capita GNP, and

cross-country differences in how well activities are coordinated could perhaps explain a large portion of cross-country inequality. Similarly, secular changes in organization might explain a large portion of the change in the Solow residual in one country over time.

Joyce, Theodore

PD January 1992. **TI** The Consequences and Costs of Maternal Substance Abuse in New York City: A Pooled Time-Series, Cross-Section Analysis. **AU** Joyce, Theodore; Racine, Andrew D.; Mocan, Naci. **AA** Joyce: City University of New York and National Bureau of Economic Research. Racine: Columbia Presbyterian Medical Center and National Bureau of Economic Research. Mocan: University of Colorado, Denver and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3987; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J13, J15, I12. **KW** Birth Weight. Children. Substance Abuse. Infant Mortality.

AB We use a pooled time series cross-section of live births in New York city between 1980 and 1989 to investigate the dramatic rise in low birth weight, especially among blacks, that occurred in the mid-1980's. After controlling for other risk factors, we estimate that the number of excess low birth weight births attributable to illicit substance abuse over this period ranged from approximately 1900 to 3800, resulting in excess neonatal admission costs of between $22 and $53 million. We conclude that illicit substance use was a major contributory factor in the rapid rise of low birth weight among blacks in New York City in the latter part of the 1980's. The impact of prenatal illicit substance abuse on whites and hispanics is less conclusive.

Kahn, Shulamit

PD November 1991. **TI** Does Employer Monopsony Power Increase Occupational Accidents? The Case of Kentucky Coal Mines. **AA** Boston University. **SR** National Bureau of Economic Research Working Paper: 3897; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J26, L51, L71, J24, J42. **KW** Industrial Safety. Mining. Occupational Choice. Safety Regulations. Monopsony.

AB A popular argument for safety regulations is that workers accept dangerous jobs because they have "no choice," or, in other words, because they have few or no alternative employment opportunities. This argument is considered in a game-theoretic framework. Because simultaneous-entry models do not yield pure-strategy equilibria, this paper develops a sequential-entry model to analyze the effect of additional firms on occupational safety. Within the context of the particular functional specification modeled, additional firms (except for the second entrant) lower average accident rates and thus increase occupational safety, consistent with the popular argument. However, with other functional specifications, the model could yield different results. As a result, the paper continues with an empirical investigation of the effect of monopsony power for a particular labor market, nonunionized Kentucky coal mines in the late-1970's, a labor market which is likely to be particularly susceptible to monopsony. The empirical work shows that areas with many choices of alternative employers within easy driving distance do have lower accident rates. For this labor market, at least, when more alternative choices in the same occupation are offered, average occupational safety levels increase. Policies that improve occupational mobility and the competitiveness of labor markets, therefore may simultaneously improve occupational safety.

Kallal, Hedi D.

TI Growth in Cities. **AU** Glaeser, Edward L.; Kallal, Hedi D.; Scheinkman, Jose A.; Shleifer, Andrei.

Kao, Duen Li

TI The Implications of Corporate Bond Rating Drift. **AU** Altman, Edward I.; Kao, Duen Li.

Kaplow, Louis

PD January 1992. **TI** A Model of the Optimal Complexity of Rules. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3958; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** D81, D83, K42. **KW** Law. Decision Rules. Decision Theory. Information. Law Enforcement.

AB Rules often are complex in order to distinguish different types of behavior that may have different consequences. Greater complexity thus allows better control of behavior. But individuals may need to incur cost ex ante to determine how more complex rules apply to their contemplated conduct. Because of such costs, some individuals will choose not to learn complex rules. Also, applying more complex rules ex post to determine applicable rewards of penalties is costly. This article models the effects of complexity on individuals' decisions to acquire information, choices about whether to act, and reports of their actions to an enforcement authority. It considers how optimal sanctions depend on the complexity of rules and determines when more complex rules improve welfare.

Karp, Larry

PD January 1992. **TI** Polish Agriculture in Transition: Does it Hurt to be Slapped by an Invisible Hand? **AU** Karp, Larry; Stefanou, Spiro. **AA** Karp: University of California, Berkeley. Stefanou: Pennsylvania State University. **SR** Centre for Economic Policy Research Discussion Paper: 622; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 57. **PR** 3 Pounds ($5.00). **JE** Q18, Q11, L43, D43, O52. **KW** Regulation. Agriculture. Poland. Monopoly. Imperfect Competition.

AB Polish economic data are assembled in order to assess the impact on the agricultural sector of the recent reforms. Evidence of recovery in this sector is slight, but the decline seems to have halted. Policy issues for agricultural reform are discussed, emphasizing regulation of monopolistic input and processing sectors. The evidence emphasizing regulation of monopolistic input and processing sectors. The evidence for the existence and nature of these monopolies is reviewed and the goals of the chief regulatory body in Poland, the Antimonopoly Office, are summarized. A selection of recent models in industrial organization, dealing with entry, horizontal mergers and vertical control are used to provide a basis for assessing the direction of Polish regulatory policy.

Katz, Lawrence F.

TI On the Labor Market Effects of Immigration and Trade. **AU** Borjas, George J.; Freeman, Richard B.; Katz, Lawrence F.

PD December 1991. **TI** Changes in Relative Wages, 1963-1987: Supply and Demand Factors. **AU** Katz, Lawrence F.; Murphy, Kevin J. **AA** Katz: Harvard University and National Bureau of Economic Research. Murphy: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3927; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J31, J24. **KW** Wages. Wage Structure. Education. Skill Differentials.

AB A simple supply and demand framework is used to analyze changes in the U.S. wage structure from 1963 to 1987. Rapid secular growth in the demand for more-educated workers, "more-skilled" workers, and females appears to be the driving force behind observed changes in the wage structure. Measured changes in the allocation of labor between industries and occupations strongly favored college graduates and females throughout the period. Movements in the college wage premium over this period appear to be strongly related to fluctuations in the rate of growth of the supply of college graduates.

TI Rising Inequality? Changes in the Distribution of Income and Consumption in the 1980s. **AU** Cutler, David M.; Katz, Lawrence F.

PD February 1992. **TI** The Effect of the Minimum Wage on the Fast Food Industry. **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** National Bureau of Economic Research Working Paper: 3997; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J21, K31, J31, J23. **KW** Minimum Wage. Employment. Labor Demand. Wages.

AB Using data from a longitudinal survey of fast food restaurants in Texas, the authors examine the impact of recent changes in the federal minimum wage on a low-wage labor market. The authors draw four main conclusions. First, the survey results indicate that less than 5 percent of fast food restaurants use the new youth subminimum wage even though the vast majority paid a starting wage below the new hourly minimum wage immediately before the new minimum went into effect. Second, although some restaurants increased wages by an amount exceeding that necessary to comply with higher minimum wages in both 1990 and 1991 recent increases in the federal minimum wage have greatly compressed the distribution of starting wages in the Texas fast food industry. Third, employment increased relatively in those firms likely to have been most affected by the 1991 minimum wage increase. Fourth, changes in the prices of meals appear to be unrelated to mandated wage changes. These employment and price changes do not seem consistent with conventional views of the effect of increases in a binding minimum wage.

Keane, Michael

PD October 1991. **TI** A Structural Model of Multiple Welfare Program Participation and Labor Supply. **AU** Keane, Michael; Moffitt, Robert. **AA** Keane: University of Minnesota. Moffitt: Brown University. **SR** Brown University Department of Economics Working Paper: 91-29; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 37. **PR** no charge. **JE** I38, J22, H24. **KW** Labor Supply. Taxes. Tax Rates. Welfare Programs. Simulation Methods.

AB One of the long-standing issues in the literature on transfer programs for the U.S. low income population concerns the high cumulative marginal tax rate on earnings induced by participation in the multiplicity of programs offered by the government. Empirical work on the issue has reached an impasse partly because the model requires the estimation of multiple sets of equations with limited dependent variables, an estimation problem which until recently has been computationally infeasible. In this paper we estimate a model of labor supply and multiple program participation using methods of simulation estimation that enable us to solve both problems. The results indicate that reductions in cumulative marginal tax rates must be very large to have any significant effect on labor supply of the low income population.

Kim, Dongwook

TI Local House Price Indexes: 1982-1991. **AU** Haurin, Donald; Hendershott, Patric; Kim, Dongwook.

Kimball, Miles S.

PD March 1991. **TI** Standard Risk Aversion. **AA** University of Michigan, Ann Arbor. **SR** National Bureau of Economic Research Technical Paper: 99; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** D81, D12. **KW** Utility Function. Risk. Expected Utility.

AB This paper introduces the concept of standard risk aversion. A von Neumann-Morgenstern utility function has standard risk aversion if any risk makes a small reduction in wealth more painful (in the sense of an increased reduction in expected utility) also makes any undesirable, independent risk more painful. It is shown that, given monotonicity and concavity, the combination of decreasing absolute risk aversion and decreasing absolute prudence is necessary and sufficient for standard risk aversion. Standard risk aversion is shown to imply not only Pratt and Zeckhauser's "proper risk aversion" (individually undesirable, independent risks always being jointly undesirable), but also that being forced to face an undesirable risk reduces the optimal investment in a risky security with and independent return. Similar results are established for the effect of broad class of increases in one risk on the desirability of (or optimal investment in) a second, independent risk.

TI Taxation of Labor Income and the Demand for Risky Assets. **AU** Elmendorf, Douglas W.; Kimball, Miles S.

PD January 1992. **TI** Precautionary Saving and Consumption Smoothing across Time and Possibilities. **AU** Kimball, Miles S.; Weil, Philippe. **AA** Kimball: University of Michigan, Ann Arbor and National Bureau of Economic Research. Weil: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3976; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E21, E13, D91. **KW** Savings. Consumption. Risk Aversion.

Intertemporal Substitution.
AB This paper examines how aversion to risk and intertemporal substitution determine the strength of the precautionary saving motive in a two-period model with Kreps-Porteus preferences. For small risks, we derive a measure of the strength of the precautionary saving motive which generalizes to these more general preferences the concept of "prudence" introduced by Kimball (1990). For large risks, we show that decreasing absolute risk aversion guarantees that the precautionary saving motive is stronger than risk aversion, regardless of the elasticity of intertemporal substitution. Holding risk preferences fixed, the extent to which the precautionary savings motive is stronger than risk aversion increases with the elasticity of intertemporal substitution. We derive sufficient conditions for the strength of the precautionary saving motive to decline with wealth and for a change in risk preferences alone to increase the strength of the precautionary saving motive.

King, Maxwell L.

TI A Locally Most Mean Powerful Based Score Test for ARCH and GARCH Regression Disturbances. **AU** Lee, John H. H.; King, Maxwell L.

Klein, Philip A.

TI Business Cycles and Inflation Cycles in the Market-Oriented World. **AU** Moore, Geoffrey H.; Klein, Philip A.

PD October 1991. **TI** Monitoring Economic Activity in Newly Privatized Economies: Statistical Targets for Eastern Europe. **AU** Klein, Philip A.; Moore, Geoffrey H. **AA** Klein: Pennsylvania State University. Moore: Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-33; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 17. **PR** $5.00 academics and non-profit institution; $6.00 corporations (add $1.00 outside U.S., Canada and Puerto Rico). **JE** C81, P17, P11, O52. **KW** Business Cycle. Europe. Privatization. Inflation. Economic Indicators.
AB As the economies of Eastern Europe turn increasingly to the private market to allocate resources, and as this process ineluctably becomes driven by profit-seeking entrepreneurial decision-making, they can expect to encounter the kind of instability in the future with which all other market-oriented economies since their inception have had to grapple. The present paper is an effort to focus what we have learned in studying instability in the West on the economies of the East and to assess, in a very preliminary way, the possibilities of setting up indicator systems in Eastern Europe based on our initial efforts at acquiring the necessary data. The present paper, then must be regarded an an effort to describe the minimal requirements for setting up indicator systems for newly privatized economies and to set a research agenda designed to test the properties of these systems in previously planned economies.

Kleiner, Morris M.

PD January 1992. **TI** Do Tougher Licensing Provisions Limit Occupational Entry? The Case of Dentistry. **AU** Kleiner, Morris M.; Kudrle, Robert T. **AA** University of Minnesota. **SR** National Bureau of Economic Research Working Paper: 3984; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J31, J24, J44, I18. **KW** Licensing. Regulation. Occupational Choice. Professional Examinations.
AB The effect of licensing as a mechanism to control entry into occupations has been a neglected area of both regulation and labor market research. This study examines the role of occupational licensing for entry into dentistry, an occupation with standards that vary by state. Our research first closely replicates Freemans' previous work on labor market cobwebs by employing national data to examine purely market phenomena in the determination of training for the dental profession. We subsequently approximate the government barrier to practice in the profession by adding a weighted average state examination pass rate to the previous model. Next, we employ pooled cross-section time series analysis to explore market determinants of professional entry with state level data. Finally, these results are supplemented by measures of statutory and pass rate entry restrictiveness. Our most consistent evidence suggests that a higher state licensing failure rate deters entry into dental practice.

Klemperer, Paul

TI Rational Frenzies and Crashes. **AU** Bulow, Jeremy; Klemperer, Paul.

Kletzer, Kenneth M.

TI Fiscal Policy Interdependence and Efficiency. **AU** Buiter, Willem H.; Kletzer, Kenneth M.

TI The Welfare Economics of Cooperative and Noncooperative Fiscal Policy. **AU** Buiter, Willem H.; Kletzer, Kenneth M.

TI Reflections on the Fiscal Implications of a Common Currency. **AU** Buiter, Willem H.; Kletzer, Kenneth M.

PD September 1990. **TI** Sovereign Debt Renegotiation in a Consumption-Smoothing Model. **AU** Kletzer, Kenneth M.; Wright, Brian D. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 610; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 61. **PR** $2.00. **JE** F34, F43. **KW** Loans. Sovereign Debt. Renegotiation. Consumption.
AB This paper examines the long-term relationship that arises when external loans are used to smooth the consumption path of a risk-averse sovereign subject to endowment shocks. We assume seniority is legally enforced in lender countries, but that no third party can enforce sovereign loan contracts. We model the loan market as a repeated game in which contracts are always subject to renegotiation; the only credible punishments are renegotiation-proof changes in the path of future transfers. Simple debt contracts with initial free entry by lenders can support transfers that achieve permanent consumption smoothing that is efficient, subject to the perfection constraints.

Knight, John B.

PD October 1991. **TI** The Determinants of Educational Attainment in China. **AU** Knight, John B.; Shi, Li. **AA** Knight: University of Oxford. Shi: Chinese Academy of Social Sciences, Beijing. **SR** Oxford Applied Economics Discussion Paper: 127; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL, ENGLAND. **PG** 33. **PR** 1 pound. **JE** I21, O53, O15. **KW** Education. China. Discrimination. Gender.

AB A national household income survey of 1988 and census data are used to examine the determinants of educational attainment in China. Among the variables analyzed are gender, age, province, minority status, rural/urban location, city size, and in a sub-sample of two generation worker households - the education of mother and father. Sex discrimination has declined over time but is still found in rural areas. The pattern for age cohorts reflects educational expansion and the major twists and turns of policy. Income level of province is important in the rural areas owing to their dependence on local funding. Family background is found to play a powerful role in China as in other countries, with interesting differences between mothers and fathers, rural and urban areas. Distinguishing demand and supply-constrained educational systems, a study is made of the opportunity cost of rural education and the reasons for dropping out of school. Despite great progress, there is still inequality of educational opportunity in China.

Kollintzas, Tryphon

TI On the Many Kinds of Growth. **AU** Eckstein, Zvi; Foulides, Costas; Kollintzas, Tryphon.

Kornhauser, Lewis A.

PD November 1991. **TI** Multi-Defendant Settlements: The Case of Superfund. **AU** Kornhauser, Lewis A.; Revesz, Richard L.; Takeda, Keith T. **AA** New York University. **SR** New York University Economic Research Reports: 91-61; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 57. **PR** no charge. **JE** K41, K32. **KW** Legal Settlement. Legal System. Environmental Law.

AB This paper offers a simple model of settlement with multiple defendants. In the model, a plaintiff makes take-it-or-leave-it offers to two defendants. Each defendant then decides independently whether to accept the offer or to litigate. These two defendants face joint and several liability with contribution (proportional to their size). In the event one party settles, the litigating party loses its right to contribution though its liability is set-off. When transaction costs are zero (and when plaintiff's probability of success against one party is uncorrelated with its success against the other), the model has a single Nash equilibrium in which plaintiff litigates against both parties. When transaction costs are positive, the paper, motivated by the legal regime governing hazardous waste, restricts attention to settlements in which the plaintiff offers to both defendants. It then characterizes plaintiff's optimal offer as a function of transaction costs. This analysis is done under both the American rule and a modified British rule governing attorney's fees.

Kostoris, Fiorella Padoa Schioppa

PD October 1991. **TI** Tax Rates, Progressivity and de facto Fiscal Indexation in Ten European Countries. **AA** Universita Internazionale degli Studi di Roma. **SR** Centre for Economic Policy Research Discussion Paper: 587; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 35. **PR** 3 pounds ($5.00). **JE** O52, O57, H22, H21, E62. **KW** Taxation. Tax System. Fiscal Policy.

AB Difficulties in European fiscal harmonization will mainly depend on present inter-country differences in effective rather than scheduled tax rate and tax structures. This paper therefore tries to evaluate the historical and current heterogeneities and similarities which characterize not only de lege, but also de facto, the tax systems regarding the workers of ten European countries (eight belonging to the EC plus Austria and Sweden): for cross-country comparisons an OECD data set for the period 1960-88 is used to measure indirect tax rates, social security contributions, average direct tax rates and the tax wedge. Through a theoretical testable model, the effective marginal tax rate of the average taxpayer, the degree of progressivity and de facto indexation of direct tax systems are identified and then estimated for each of the years and the countries under examination. By looking at these data and these estimates we conclude that tax harmonization in Europe is easier to achieve in the 1990's that it would have been in the previous thirty years because de facto a large tax convergence has already been obtained in Europe, especially in the last decade.

PD October 1991. **TI** A Cross-Country Analysis of the Tax-Push Hypothesis. **AA** Universita Internazionale degli Studi di Roma. **SR** Centre for Economic Policy Research Discussion Paper: 588; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 42. **PR** 3 pounds ($5.00). **JE** E62, O57, O52, E24. **KW** Taxation. Wages. Fiscal Policy. Europe.

AB A microeconomic theoretical model shows that two factors - the compensation and progressivity effect - produce the shifting (if any) of tax rates on wage formation. From an analytical viewpoint, they may be positive or negative and of equal or different sign. A microfounded nested macroeconomic wage equation is then tested for nine European countries for the period 1960-88. Three robust regularities seem to emerge from our econometric results. First, in general, small open economies such as Austria, Denmark and the Netherlands have negligible compensation and progressivity effects: to maintain their external competitiveness they fix a real labor cost target independent of tax rates. Second, larger and less open European economies, in contrast, transfer indirect and social security tax rate increases on the real labor cost in the long run, except Italy and the U.K.; in these greater economies, a rise in the direct tax rate raises the steady-state gross real wage. Third, all European countries show a weakening of tax shifting on the real labor cost between the end of the 1970's and the beginning of the 1980's.

Kotlikoff, Laurence J.

TI Life Insurance Inadequacy-Evidence from a Sample of Older Widows. **AU** Auerbach, Alan J.; Kotlikoff, Laurence J.

TI Social Security and Medicare Policy from the Perspective of Generational Accounting. **AU** Auerbach, Alan J.; Gokhale, Jagadeesh; Kotlikoff, Laurence J.

Krell, Roberto

TI Leading Indicators for the Semiconductor Business. **AU** Moore, Geoffrey H.; Krell, Roberto.

Krueger, Alan B.

TI Environmental Impacts of a North American Free Trade Agreement. **AU** Grossman, Gene M.; Krueger, Alan B.

TI The Effect of the Minimum Wage on the Fast Food Industry. **AU** Katz, Lawrence F.; Krueger, Alan B.

Kudrle, Robert T.

TI Do Tougher Licensing Provisions Limit Occupational

Entry? The Case of Dentistry. AU Kleiner, Morris M.; Kudrle, Robert T.

Kurosaka, Yoshio

PD August 1991. **TI** A Simple Estimation of the NAIRU in the Japanese Economy: 1953-85. **AA** Musashi University. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 45; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 26. **PR** not available. **JE** E24, E31. **KW** Unemployment. Inflation. Labor Demand. Japan.

AB This paper focuses on an estimation of the NAIRU in the Japanese economy between 1953 and 1985. The estimation of the NAIRU consists of two stages. The first regression is to obtain a wage equation which has demand and supply conditions in the labor market, and inflationary expectations as the two main explanatory variables. At the second stage an unemployment equation is specified. The unemployment equation is constructed so as to have the calculated ratio of the ex ante labor demand to supply from the estimated wage equation, and additional variables capturing structural changes in the labor market. The NAIRU is computed in the unemployment equation by setting the ratio of labor demand to supply to unity. The estimated NAIRU keeps decreasing between 1953 and 1966 with the exception of 1959, while it continues to rise during 1967 and 1985.

Laidler, David E. W.

PD November 1991. **TI** The Cycle before New-Classical Economics. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9115; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 39. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** B22, E32. **KW** Business Cycle. Monetarist. Macroeconomics. Economic Thought.

AB In the following pages, I shall first give an account of how business cycle theory fitted into the macroeconomic consensus of the 1950's and early 1960's, and then discuss Monetarism's role in disturbing this aspect (along with many others) of the consensus in question, paying particular attention to the predictions of monetarist models about the cyclical behavior of money and prices. I shall go on to argue that the main strength of later New-classical economics, in the Lucas-Sargent-Wallace mode, was not so much its explanatory power, as its conformity to particular a priori methodological criteria, and that modern real business cycle theory also conforms to those criteria.

PD November 1991. **TI** Price Stability and the Monetary Order. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9116; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 33. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** E42, E52, B22, E31. **KW** Monetary Economics. Inflation. Monetary Policy.

AB Monetary economics is now going through the painful process of rediscovering and refining ideas about money and inflation in the tradition that Jevons defended. This essay, then, though critical of certain monetarist ideas, is nevertheless firmly in their tradition. It begins with a brief discussion of the desirability of price stability, defending the monetarist position on this matter with some rather non-monetarist arguments. It then argues that the traditional monetarist policy proposal, to achieve price stability into the indefinite future by legislating a policy rule to bind the monetary authorities once and for all, is indefensible in the face of the facts of institutional evolution in the monetary system.

LaLonde, Robert J.

TI Estimating the Effect of Training on Employment and Unemployment Durations: Evidence from Experimental Data. **AU** Ham, John C.; LaLonde, Robert J.

Lambert, Peter J.

PD June 1990. **TI** Income Tax Progression and Redistributive Effect: The Influence of Changes in the Pre-Tax Income Distribution. **AU** Lambert, Peter J.; Pfahler, Wilhelm. **AA** Lambert: University of York and Institute for Fiscal Studies. Pfahler: Koblenz School of Corporate Management. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/6; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 28. **PR** 3 pounds. **JE** D31, H23. **KW** Income Distribution. Income Taxes. Redistribution.

AB The paper examines the influence of changes in the pre-tax income distribution upon the redistributive effect and global progressivity of income taxation, adopting the widely-used Musgrave/Thin-Kakwani framework of analysis. We demonstrate why it is not possible to make general predictions for real world scenarios. Nevertheless, some definitive predictions can be made about how income transfers and growth in incomes, separately or together, operate on redistributive effect and progressivity. The results cast doubt on the significance of casual interpretations to be found in many existing simulation and empirical studies. They also pave the way for future theoretical, empirical and simulation work in this area.

Lambertini, Luisa

PD December 1991. **TI** Inflation Convergence with Realignments in a Two-Speed Europe. **AU** Lambertini, Luisa; Miller, Marcus; Sutherland, Alan. **AA** Lambertini: University of California, Berkeley. Miller: University of Warwick. Sutherland: University of York. **SR** Centre for Economic Policy Research Discussion Paper: 597; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 12. **PR** 3 Pounds ($5.00). **JE** F33, F36, F31, F21. **KW** European Monetary System. Inflation. Capital Mobility.

AB In the first decade of its existence the EMS passed through three phases of realignments: full accommodation, partial accommodation and zero accommodation of inflation differentials. To what extent, however, does the new freedom of capital movements within the EC rule out such gradual convergence with realignments for new members? This paper uses a model with forward-looking behavior in labor and financial markets to analyze this question. A rule which partially accommodates inflation differentials is shown to be consistent with inflation convergence and perfect capital mobility, provided that the timing of realignments is stochastic and the rule is fully credible.

Lane, Timothy D.

PD November 1991. **TI** Wage Controls and Employment in a Socialist Economy. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/111; International Monetary Fund, Washington, DC 20431. **PG** 14. **PR** not available. **JE** P31, E64, E63. **KW** Wages. Socialist Enterprises. Stabilization Policy. Socialism. Employment.

AB Wage controls have been an important element of several of the stabilization programs recently introduced in reforming socialist economies. In some cases, the controls have been placed on each state enterprise's total wage bill, rather than on the wage rate paid. Such an incomes policy would be expected to have a dampening effect on employment, but this has not generally occurred; on the contrary, declines in employment in state enterprises have typically been much less than the associated declines in output. This paper presents a simple model of a labor-managed enterprise which offers an explanation of the behavior of wages and employment under such an incomes policy.

TI Market Liberalization Policies in a Reforming Socialist Economy. **AU** Dinopoulos, Elias; Lane, Timothy D.

Lang, Kevin

PD July 1991. **TI** An Analysis of the Nature of Unemployment in Sri Lanka. **AU** Lang, Kevin; Dickens, William T. **AA** Lang: Boston University and National Bureau of Economic Research. Dickens: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3777; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J64, J45, O53. **KW** Unemployment. Public Sector. Sri Lanka. India.

AB Sri Lanka has a significant chronic unemployment problem. Depending on the time period and the definition of unemployment it varies from the low teens to over twenty percent. Nearly all of this unemployment is concentrated among young people who are looking for their first job. Unemployment duration is very long with typical spells lasting four years or more. Although past authors have blamed unemployment on over-education, a closer examination shows that once sex, sector and age are controlled for the relation between education and unemployment disappears for urban youth and is significantly weakened for rural youth. We believe that unemployment is generated in part by queuing for high wage government jobs. We suggest that one reason the unemployed do not take other employment while queuing may be a perceived or real government preference for hiring the unemployed.

Lattin, James M.

PD December 1988. **TI** The Impact of Store Brands on Manufacturer Trade Deals and Retail Price Promotion. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1026; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 44. **PR** not available. **JE** L14, L81, L21, L13, D43. **KW** Retail Prices. Store Brands. Retail Trade. Manufacturing. Pricing.

AB In this research, we examine the nature of promotional pricing activity by manufacturer and retailer. We analyze the relationship as a single period sequential game between a manufacturer offering a single brand A and an independent retailer who sells brand A and its own store brand B. We begin by showing, in the absence of store brand competition, that while the retailer will discount the price of brand A to take advantage of consumer stockpiling behavior, the manufacturer will not offer trade deals. We then show, in the presence of store brand competition, the conditions under which the manufacturer will use trade deals as an incentive to achieve favorable retail pricing for brand A relative to the store brand.

Lau, Lawrence J.

TI Firm-Level Productivity and Management Influence: A Comparison of U.S. and Japanese Automobile Producers. **AU** Lieberman, Marvin B.; Lau, Lawrence J.; Williams, Mark D.

Lavy, Victor

TI Public Policy and Anthropometric Outcomes in the Cote d'Ivoire. **AU** Thomas, Duncan; Lavy, Victor; Strauss, John.

Layard, Richard

TI How to Privatise. **AU** Blanchard, Olivier Jean; Layard, Richard.

Lazear, Edward P.

PD November 1991. **TI** Prices and Wages in Transition Economies. **AA** Stanford University and University of Chicago. **SR** Stanford Hoover Institute Working Paper in Economics: E-91-13; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 24. **PR** not available. **JE** E64, O52, P52. **KW** Prices. Wages. Europe. Privatization. Shortages.

AB Most prices have been decontrolled in Eastern Europe. Exceptions remain mostly for energy and basic foodstuffs. By contrast, wages are severely constrained. The asymmetry reflects problems with managerial incentives as well as fiscal considerations which will be alleviated when managerial compensation is tied to profitability and when an explicit tax system is instituted. The price controls that do exist lead to hoarding and distortions. In the Soviet Union, these distortions are pervasive. An analysis that compares Soviet prices with U.S. prices shows that they line up reasonably well on average, but that there are some major discrepancies. Still, the conclusion is that shortages occur primarily because the wage/price ratio is out of line, creating a surplus of money at state set prices. If relative price distortions are important, the distortions are generated by the prices of raw materials, energy, and intermediate goods. Further, even correct relative prices do not provide appropriate signals in this command economy.

Leamer, Edward E.

PD January 1992. **TI** Testing Trade Theory. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3957; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** B41, A11, B21. **KW** Economics. International Theory. Microeconomics.

AB This review of the empirical literature in international microeconomics observes that data have had a disappointingly small effect on the intellectual lives of international economists. The reasons for this are many and diverse, but one general comment is made here: We need better balance between the three layers of the argument: the issues, the theory and the data. The profession as a whole is imbalanced in favor of theory. But most of the empirical work is also imbalanced. Some empirical studies take the theory too seriously and lose track of the issues. Others do not take the theory seriously enough and try to make do with ad hoc but inappropriate empirical models. Some of these which lack the theory layer lack as well any clear issues. We need better balance.

PD February 1992. **TI** Wage Effects of a U.S.-Mexican Free Trade Agreement. **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3991; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F13, F14, J31. **KW** Protectionism. International Trade. Wages. Unskilled Labor.

AB Mexico doesn't seem economically large enough now to have a significant effect on the prices of goods and the earnings of labor in the United States, but Mexican population growth and productivity gains induced by liberalization will make the Mexico of the future much larger than today, especially in those sectors that use intensively Mexico's abundant low skill labor. Furthermore, in a free trade agreement with the United States, Mexico has an incentive to concentrate production on those sectors that are most protected by the U.S. from third-country competition, and to export all that product to the high-priced protected U.S. market. For all these reasons, the Mexico of the future is large enough to undo current or future U.S. protection designed to maintain wages of low-skilled workers. With or without a free trade agreement, the United States faces a substantial problem with the continuing economic deterioration of the lowest skilled workers. A free trade agreement with Mexico would keep the U.S. from using protectionism to deal with this problem.

Lee, John H. H.

PD October 1991. **TI** A Locally Most Mean Powerful Based Score Test for ARCH and GARCH Regression Disturbances. **AU** Lee, John H. H.; King, Maxwell L. **AA** Monash University. **SR** Monash Department of Econometrics Working Paper: 9/91; Department of Econometrics, Faculty of Economics and Politics, Monash University, Clayton, Victoria 3168, AUSTRALIA. **PG** 31. **PR** no charge. **JE** C22, C52, C12, C15. **KW** Autoregression. Linear Regression Model. Score Test. Heteroskedasticity.

AB This paper considers the twin problems of testing for ARCH and GARCH disturbances in the linear regression model. A feature of these testing problems, ignored by the standard Lagrange multiplier test, is that they are one-sided in nature. A test which exploits this one-sided aspect is constructed based on the sum of the scores. Its small sample size and power properties under both normal and leptokurtic disturbances are investigated via a Monte Carlo experiment. The results indicate that the new test typically has superior power to two versions of the Lagrange multiplier test and possibly also more accurate asymptotic critical values.

Lehmann, Hartmut

TI Flow and Stock Analysis of Polish Unemployment: January 1990-June 1991. **AU** Gora, Marek; Lehmann, Hartmut.

Levy, Aviram

TI Cross-Border Deposits and Monetary Aggregates in the Transition to EMU. **AU** Angeloni, Ignazio; Cottarelli, Carlo; Levy, Aviram.

Levy, Santiago

PD February 1992. **TI** Transition Problems in Economic Reform: Agriculture in the Mexico-U.S. Free Trade Agreement. **AU** Levy, Santiago; van Wijnbergen, Sweder. **AA** Levy: Boston University. van Wijnbergen: World Bank. **SR** Centre for Economic Policy Research Discussion Paper: 624; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 39. **PR** 3.00 pounds or $5.00. **JE** F13, F15, Q17. **KW** Economic Reform. Free Trade. Agriculture. Mexico.

AB At what speed should Mexican agriculture be incorporated into the North American Free Trade Agreement (FTA)? What policies should characterize the transition? We use Mexican agriculture as a case study to analyze the transition problems that arise in most major economic reforms. In particular, European Community (EC) farmers can expect similar problems if the Common Agricultural Policy (CAP) is dismantled and/or Eastern Europe gains unrestricted access to the EC's farm product markets. We focus on the implications for policy design of the absence of efficient capital markets, on the welfare costs of reforming only gradually, on incentive problems created by trade adjustment policies, and on the redistributive aspects of policy reform in the presence of realistic limits on available intervention instruments. Our key point is that adjustment should focus on increasing the value of the assets owned by the groups affected, and not on direct income transfers or programs targeting output or other characteristics controlled by the beneficiaries. We target adjustment on what people have, as opposed to what people do.

Lewbel, Arthur

TI The Information Content of Equivalence Scales. **AU** Blundell, Richard; Lewbel, Arthur.

Lewis, Karen K.

TI Peso Problems and Heterogeneous Trading: Evidence from Excess Returns in Foreign Exchange and Euromarkets. **AU** Evans, Martin D. D.; Lewis, Karen K.

Lichtenberg, Frank R.

PD December 1991. **TI** Labor Market Institutions, Liquidity Constraints, and Macreconomic Ability. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3926; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E23, E24, E32. **KW** Employment. Output. Business Fluctuations. Consumption.

AB The sensitivity of employment and real wages -- hence aggregate labor income -- to short-run fluctuations in output varies across countries. We develop a simple theoretical model to show that, if workers, but not capitalists, are liquidity constrained, the sensitivity of an economy to exogenous expenditure shocks is inversely related to the extent to which capitalists, rather than workers, bear fluctuations in income. We perform an econometric test of this proposition using cross-sectional, country level data on elements of the (time series) covariance matrix of output, employment, real wages, and investment. We argue that, for two reasons, our estimate of the elasticity of consumption with respect to labor income is likely to be biased towards zero. Nevertheless, our estimate of this parameter is highly significantly different from zero, and is also consistent with previous estimates (obtained from a completely different specification). The empirical results support the view that the lower the sensitivity of labor income to output fluctuations, the smaller the output fluctuations themselves will be. Low sensitivity contributes indirectly as well as directly to the stability of labor income.

Lieberman, Marvin B.

PD May 1989. **TI** Exit from Declining Industries: "Shakeout" or "Stakeout"? **AA** Standford University. **SR** Stanford Graduate School of Business Research Paper: 1043; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 43. **PR** not available. **JE** L65, L16, D21. **KW** Exit. Declining Industries. Manufacturing.

AB Data on thirty declining chemical products are used to test theories of exit. The results offer support for two different models. The first model predicts that small firms would be most likely to exit. The second model predicts that large producers would make disproportionate cuts in capacity. The fact that both models are supported suggests that the sequence of capacity reductions in a declining industry depends on inter-firm differences in both revenue and cost.

PD June 1989. **TI** Firm-Level Productivity and Management Influence: A Comparison of U.S. and Japanese Automobile Producers. **AU** Lieberman, Marvin B.; Lau, Lawrence J.; Williams, Mark D. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1048; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 47. **PR** not available. **JE** L62, D24. **KW** Productivity. Automobile Industry.

AB This study compares the productivity of six major U.S. and Japanese motor vehicle manufacturers-General Motors, Ford, Chrysler, Toyota, Nissan and Mazda-from the early 1950's through 1987. Techniques of productivity measurement, conventionally applied at the level of industries or national economies, are adapted for the analysis of individual firms. Several potential determinants of growth in productivity are evaluated, including economies of scale, adoption of "just-in-time" manufacturing, and changes in top management. The results show that productivity improvement by the six motor vehicle producers was attained primarily through more efficient utilization of labor; long-term growth in capital productivity was negligible for most firms.

PD July 1989. **TI** Post-Entry Pricing and Vertical Integration in the Chemical Process Industry. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1050; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 27. **PR** not available. **JE** L65, L22, L42. **KW** Vertical Integration. Chemical Industries. Vertical Mergers. Manufacturing.

AB This paper examines the magnitude of price changes following entry into markets for 30 undifferentiated chemical products. On average, prices fell by about 6% in years when entry occurred. Price cuts were roughly twice as deep when the entrant was a buyer integrating backward. Producer concentration had no significant influence on post-entry pricing behavior, and predatory price cutting appears to have been rare. Nevertheless, concentration did mitigate price cutting when incumbents opened new plants in the absence of entry. These findings are interpreted in the context of theoretical models of vertical integration and entry.

Lin, Wen-Ling

PD November 1991. **TI** Do Bulls and Bears Move across the Borders? International Transmission of Stock Returns and Volatility as the World Turns. **AU** Lin, Wen-Ling; Engle, Robert F.; Ito, Takatoshi. **AA** Lin: University of Wisconsin, Madison. Engle: University of California, San Diego and National Bureau of Economic Research. Ito: Hitotsubashi University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3911; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 22. **PR** $3.00. **JE** G14, G15, F36. **KW** Stock Market. Market Return. Market Volatility. Information.

AB This paper investigates empirically how returns and volatilities of stock indices are correlated between Tokyo and New York. Intradaily data are used, so that daytime and overnight returns are defined for both markets. Tokyo daytime hours overlap with New York overnight hours, while New York daytime hours overlap with Tokyo overnight hours. We find that in general Tokyo (New York) daytime returns are significantly correlated with New York (Tokyo) overnight returns. This suggests that information revealed during the trading hours of one market has a global impact on the returns of the other market. One exception is that after the October 1987 Crash, the Tokyo overnight returns were not significantly affected by New York daytime returns. We propose and estimate a signal extraction model with GARCH processes to determine the global factor from daytime returns. We also investigate lagged return and volatility spillovers. Except for a lagged return spillover from New York to Tokyo for the period after the Crash, there are no significant lagged spillovers in returns or in volatilities.

Lindberg, Hans

PD November 1991. **TI** Devaluation Expectations: The Swedish Krona 1982-1991. **AU** Lindberg, Hans; Svensson, Lars E. O.; Soderlind, Paul. **AA** Lindberg: Sveriges Riksbank. Svensson: Stockholm University and National Bureau of Economic Research. Soderlind: Stockholm University and Princeton University. **SR** National Bureau of Economic Research Working Paper: 3918; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** $3.00. **JE** F31, E47, E42. **KW** Exchange Rate. Interest Rate. Devaluation. Interest Parity.

AB Devaluation expectations for the Swedish krona are estimated for the period 1982-1991 with several methods. First the "simplest test" is applied under either only the minimal assumption of "no positive minimum profit" or the additional assumption of uncovered interest parity. Then a more precise method suggested by Bertola and Svensson is used, in which expected rates of depreciation within the exchange rate band, estimated in several ways, are subtracted from interest rate differentials. In addition the probability density of the time devaluation expectations are to some extent explained by a few macrovariables and parliament elections.

Liu, Crocker H.

PD November 1991. **TI** A Fundamental Analysis of Japanese Equity and Real Estate Markets. **AU** Liu, Crocker H.; Mei, Jianping. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: S-91-53; Salomon Brothers Center for the Study of Financial Institutes, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 12. **PR** $5.00. **JE** G12, G14. **KW** Asset Pricing. Stock Market. Japan. Capital Markets.

AB Previous studies have found that the return behavior on Japanese assets is consistent with the existing evidence on U.S. stocks in general. The current study offers new insights which suggest that Japanese equity and real estate markets might not necessarily behave in a parallel manner to U.S. capital markets. These insights are obtained from an examination of the nature of expected and unexpected movements in the returns on various Japanese assets using a present value model which allows for a time-varying expected discount rate in conjunction with a VAR process. One distinctive characteristic of Japanese asset returns which the study finds is that in the absence of a "rational bubble," fundamental values drive the Japanese stock market. Thus, fundamental stock analysis based on discounting cash flows might be a fruitful endeavor. Another major behavioral attribute which this study finds is that no mean-reversion exists for returns on all Japanese assets within a seven year horizon.

PD November 1991. **TI** An Analysis of Real Estate Risk Using the Present Value Model. **AU** Liu, Crocker H.; Mei, Jianping. **AA** New York University. **SR** New York University Salomon Brothers Center Working Paper: S-91-54; Salomon Brothers Center for the Study of Financial Institutions, Graduate School of Business Administration, New York University, 90 Trinity Place, New York, NY 10006. **PG** 14. **PR** $5.00. **JE** R32, R22, R11. **KW** Real Estate. Risk.

AB The current study uses returns on equity REITs to examine the nature of risk associated with commercial real estate. A present value model which allows for a time-varying expected discount rate is used in conjunction with a VAR process to decompose risk in two stages. First total risk is separated into contemporaneous expected and unexpected movements in returns. Next, unexpected movements in real estate returns are further partitioned into cash flow risk, discount rate risk, and the covariance between the two types of risks. This risk decomposition process results in our finding that the variance of unexpected returns accounts for most of the total real estate risk with cash flow risk accounting for twice as much of the unexplained real estate risk although discount rate risk is also an important factor. This evidence tends to validate the role of fundamental real estate analysis based on discounting cash flows. Evidence is also found that the dominance of cash flow risk leads to a weaker mean reversion process for real estate relative to either large cap or small cap stocks.

Liviatan, Nissan

TI The Dynamics of Optimal Gradual Stabilizations. **AU** Cukierman, Alex; Liviatan, Nissan.

Lopes, Paulo S.

PD September 1991. **TI** Mozambique: Economic Rehabilitation and the Poor. **AU** Lopes, Paulo S.; Sacerdoti, Emilio. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/101; International Monetary Fund, Washington, DC 20431. **PG** 22. **PR** not available. **JE** O55, O15, I31, E64. **KW** Agriculture. Foreign Aid. Wages. Stabilization Policy.

AB Poverty has remained widespread in Mozambique, mostly on account of the prevalent war situation. This paper provides a profile of the lowest income groups in Mozambique and examines how they were affected by the economic recovery program of 1986-90. The results, indicate that despite large price adjustments, in real terms minimum and low wages improved over the 1986-90 period. Agricultural production increased in response to better incentives, and small farmers in safe areas improved their relative income position. However, in the presence of a large refugee population and war-related destruction, there continues to be a pressing need for extended emergency aid.

Louri, Helen

TI Investment in Inventories: An Empirical Microeconomic Model of Firm Behaviour. **AU** Hay, Donald; Louri, Helen.

Lovell, C. A. Knox

TI Trade and Efficiency Effects of Domestic Content Protection: The Australian Tobacco and Cigarette Industries. **AU** Beghin, John C.; Lovell, C. A. Knox.

Lyon, Andrew B.

PD December 1991. **TI** Consumption Taxes in a Life-Cycle Framework: Are Sin Taxes Regressive? **AU** Lyon, Andrew B.; Schwab, Robert M. **AA** University of Maryland, College Par, College Park. **SR** National Bureau of Economic Research Working Paper: 3932; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $3.00. **JE** E21, H22, H24, D12. **KW** Tax Policy. Tax Incidence. Alcohol. Consumption.

AB In this paper we construct measures of tax incidence over the life cycle and compare these measures to traditional measures based on annual data. We show that annual measures of the incidence of taxes on consumption goods may differ from life cycle measures for three reasons. First, annual measures of income reflect transitory components which should have smaller effects on consumption than permanent changes in income. Second, income measured in a single period differs from lifetime income due to age-related differences in earnings. Third, consumption of certain items follows life cycle patterns independent of changes in income. Surprisingly we find that these effects cause almost no change in the assessment of the incidence of taxes applying to the consumption of cigarettes. For alcohol, however, we find that a tax on its consumption is slightly less regressive when measured with respect to lifetime income than when measured with respect to annual income.

Lyons, Richard K.

PD July 1991. **TI** Floating Exchange Rates in Peru, 1950-54. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3775; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F31, O54, E42, E44. **KW** Exchange Rate. Peru.

AB I test three potentially complementary models in an effort to capture the fundamentals that underlaid the market's determination of Peru's floating exchange rate through the period 1950-54: the first is an expectational purchasing power parity (PPP) model which maintains that asset market forces were driving the exchange rate to its perceived PPP level; the second is a flexible-price monetary model; and the third is a model along the lines described by Tsiang (1957) which emphasizes world prices for Peruvian exports as a fundamental determinant. I find that the expectational PPP model not only dominates the others, but also fits quite well.

TI Some Evidence of Productivity Linkages in Manufacturing. **AU** Caballero, Ricardo J.; Lyons, Richard K.

TI Exchange Rate Hysteresis: Large Versus Small Policy Misalignments. **AU** Baldwin, Richard E.; Lyons, Richard K.

Ma, Yue

TI East Germany, West Germany, and their Mezzogiorno Problem: An Empirical Investigation. **AU** Hughes Hallett, Andrew J.; Ma, Yue.

Machin, Stephen

TI Signals and Cycles: Productivity Growth and Changes in Union Status in British Companies, 1984-1989. **AU** Gregg, Paul; Machin, Stephen; Metcalf, David.

Madsen, Ib Fredslund

PD April 1991. **TI** Local Involvement and Cross-Border Banking: Empirical Documentation from Latin America. **AA** University of Aarhus and Boston University. **SR** Aarhus Institute of Economics Memo: 1991-26; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 46. **PR** no charge. **JE** F23, F34, G21, O16, O57. **KW** International Banking. Financial Markets. South America. External Debt.

AB In this paper we document the penetration of international banks into the local banking system of the three Southern Cone countries; Uruguay, Argentina and Chile. We also study how this development is related to both the external lending to these countries by international banks and to the official banking policy of these countries. The case of Chile is studied in detail down to the individual bank level, and can be seen as an empirical investigation of the Derivative Business theory (Madsen (1989)).

Maglad, Nour Eldin

PD July 1990. **TI** Fertility in Rural Sudan: The Effect of Landholding and Child Mortality. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 604; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 13. **PR** $2.00 + postage. **JE** J13, I12, Q12, O55, O12. **KW** Fertility. Mortality. Children. Households. Sudan.

AB This paper analyzes the response of fertility to child mortality and landholding of the agricultural household in rural Sudan. The micro- economic framework of fertility behavior is used as a basis for the analysis of a demand function for children. Because child mortality is more likely to be correlated with both the biological and behavioral determinants of fertility, Two Stage Least Squares are used to estimate the parameters of the demand equation for children. In one equation the cross-sectional mortality rate is used as an instrumental variable for child deaths. In the other a regional health variable is used to identify the demand function. The results indicate that fertility responds positively to child mortality and that the replacement response to child deaths is less than unity which indicates that a given percentage decline in child mortality is expected to be partially offset by a reduction in fertility. Also fertility responds positively and inelastically to cultivated land. The effect of some other socio-economic variables of the demand for births is also discussed.

Mairesse, Jacques

TI Exploring the Relationship Between R&D and Productivity in French Manufacturing Firms. **AU** Hall, Bronwyn H.; Mairesse, Jacques.

Malathy, R.

TI Impact of Public Programs on Fertility and Gender Specific Investment in Human Capital of Children in Rural India: Cross Sectional and Time Series Analyses. **AU** Duraisamy, P.; Malathy, R.

Mamuneas, Theofanis P.

TI The Effects of Public Infrastructure and R&D Capital on the Cost Structure and Performance of U.S. Manufacturing Industries. **AU** Nadiri, M. Ishaq; Mamuneas, Theofanis P.

Marin, Dalia

PD December 1991. **TI** Monopoly, Tying and Reciprocity: An Application to International Trade. **AA** Institute for Advanced Studies, Austria. **SR** Centre for Economic Policy Research Discussion Paper: 609; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 34. **PR** 3 Pounds ($5.00). **JE** F12, F13, P42. **KW** Trade Policy. Subsidy. Imports. Europe. Trade Model.

AB This paper sees countertrade as a means by which the PCPEs (previously centrally planned economies) and LDCs extract some of the monopoly profits from firms in OECD countries to subsidize their exports. Viewed in this way, countertrade is an exchange of market entry for marketing assistance in which the PCPEs and LCDs effectively shift the terms of trade in their favor. Based on a new sample of 230 countertrade contracts, which have been signed between firms in OECD countries and PCPEs and LDCs in the period between 1984 and 1988, the paper estimates the likelihood of such terms of trade change as a function of the market power of OECD firms, the extent to which goods offered by the PCPEs/LDCs in the contract reflect comparative advantage, and the information available in the bargaining over the terms of the contract. The data are consistent with the view that countertrade is used by the PCPEs/LDCs as a vehicle to reduce the effective price of their imports. Since it is equivalent to an import tax cum export subsidy in the presence of foreign market power, countertrade raises the welfare of the PCPEs/LDCs by allowing them to recapture some of the monopoly rents the OECD firms are extracting from their consumers in PCPEs/LDCs.

Masson, Paul R.

TI Models of Inflation and the Costs of Disinflation. **AU** Chadha, Bankim; Masson, Paul R.; Meredith, Guy.

PD February 1992. **TI** Common Currency Areas and Currency Unions: An Analysis of the Issues. **AU** Masson,

Paul R.; Taylor, Mark P. **AA** International Monetary Fund. **SR** Centre for Economic Policy Research Discussion Paper: 617; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 85. **PR** 3.00 pounds or $5.00. **JE** E63, F33, F36. **KW** Currency Union. Monetary Union. Monetary Policy. Fiscal Policy. Economic Integration.
AB This paper discusses the conditions under which currency unions would be desirable and viable. We discuss and present new empirical evidence concerning the operation of existing currency unions in federal states and among regional country groupings. In particular, we examine the traditional criteria for optimal currency areas and present evidence concerning the shock-absorbing properties of federal fiscal systems and the discipline imposed on the public sector by financial markets. We also examine the implications of economic heterogeneity across a currency union, and whether or not convergence should be achieved before rather than after the union occurs. In addition, some issues relating to the possible transition towards monetary union in Europe are considered.

Matsui, Akihiko
PD December 1991. **TI** An Approach to Equilibrium Selection. **AU** Matsui, Akihiko; Matsuyama, Kiminori. **AA** Matsui: University of Pennsylvania. Matsuyama: Northwestern University and Stanford University. **SR** Stanford Hoover Institute Working Paper in Economics: E-91-14; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 22. **PR** not available. **JE** C72. **KW** Noncooperative Games. Equilibrium Selection. Nash Equilibrium. Matching Games.
AB We consider equilibrium selection in the 2x2 bimatrix games with two strict Nash equilibria in a random matching framework. The players seek to maximize the discounted payoff, but are restricted to making a short-run commitment. Modeling the friction in this way yields equilibrium dynamics of the behavior patterns in the society. We define and characterize an absorbing and globally attractive state in this dynamics. It is shown that, as friction becomes arbitrarily small, a strict Nash equilibrium outcome becomes uniquely absorbing and globally attractive if and only if it satisfies the Harsanyi/Selten notion of risk dominance criterion.

Matsuyama, Kiminori
PD June 1991. **TI** Imperfect Competition. Foreign Trade, and the Multipliers: Machlup-Metzler Fifty Years Later. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 947; J.L. Kellogg Graduate School of Mangement, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 20. **PR** no charge. **JE** F12, F15, F42, F41. **KW** International Trade. Policy Coordination. Imperfect Competition.
AB This paper constructs a general equilibrium model of imperfect competition and international trade and investigates the international transmissions of country specific aggregate demand shocks, such as changes in taste and fiscal policies. The impact of coordinated fiscal expansion and of transfer payments are also discussed. The model has some curious resemblance with earlier Keynesian models of open economies, notably of the Machlup-Metzler variety, which emphasize the role of foreign trade multipliers in income determination in interdependent national economies.

TI An Approach to Equilibrium Selection. **AU** Matsui, Akihiko; Matsuyama, Kiminori.

Mavrotas, George
TI Workforce Training in the Thatcher Era - Market Forces and Market Failures. **AU** Greenhalgh, Christine; Mavrotas, George.

TI Job Training, New Technology and Labour Turnover. **AU** Greenhalgh, Christine; Mavrotas, George.

Mayer, Colin P.
TI Corporate Finance in the Euromarkets and the Economics of Intermediation. **AU** Davis, Phil; Mayer, Colin P.

McConnell, Sheena
TI The Impact of Collective Bargaining Legislation on Disputes in the U.S. Public Sector: No Policy may be the Worst Policy. **AU** Currie, Janet; McConnell, Sheena.

McGuire, Paul
TI Computing Markov Perfect Nash Equilibria: Numerical Implications of a Dynamic Differentiated Product Model. **AU** Pakes, Ariel; McGuire, Paul.

McKay, Stephen
TI The Simulation of Indirect Tax Reforms: The IFS Simulation Program for Indirect Taxation (SPIT). **AU** Baker, Paul; McKay, Stephen; Symons, Elizabeth.

McLaren, Keith R.
TI An Empirically Oriented Demand System with Improved Regularity Properties. **AU** Cooper, Russel J.; McLaren, Keith R.

Mei, Jianping
TI Where do Betas Come From? Asset Price Dynamics and the Source of Systematic Risk. **AU** Campbell, John Y.; Mei, Jianping.

TI A Fundamental Analysis of Japanese Equity and Real Estate Markets. **AU** Liu, Crocker H.; Mei, Jianping.

TI An Analysis of Real Estate Risk Using the Present Value Model. **AU** Liu, Crocker H.; Mei, Jianping.

Melitz, Jacques
PD October 1991. **TI** A Suggested Reformulation of the Theory of Optimal Currency Areas. **AA** National Institute of Statistics and Economic Studies. **SR** Centre for Economic Policy Research Discussion Paper: 590; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 17. **PR** 3 pounds ($5.00). **JE** F02, F15, F41. **KW** Currency. Exchange Rate. Monetary Union.
AB In contrast to conventional analyses of monetary union between two particular countries or sets of countries, this paper treats the possible expansion of a given currency area as a continuous variable ranging from zero to one; zero if there is no expansion and one if all sources of imports and competition in trade are included in the union. The optimal order in which new members are admitted to the union then becomes one aspect of the problem. It is shown that by using this approach, it is easier

to defend the argument that many nations are too small to form optimal currency areas. The demands upon the origin of the shocks, factor mobility, and political organization are smaller. The approach also fits better with the evidence.

Meredith, Guy

TI Models of Inflation and the Costs of Disinflation. **AU** Chadha, Bankim; Masson, Paul R.; Meredith, Guy.

Merton, Robert C.

TI Labor Supply Flexibility and Portfolio Choice in a Life-Cycle Model. **AU** Bodie, Zvi; Merton, Robert C.; Samuelson, William F.

Metcalf, David

TI Strike Incidence and Duration in British Manufacturing Industry in the 1980's. **AU** Ingram, Peter; Metcalf, David; Wadsworth, Jonathan.

TI Signals and Cycles: Productivity Growth and Changes in Union Status in British Companies, 1984-1989. **AU** Gregg, Paul; Machin, Stephen; Metcalf, David.

Metcalf, Gilbert E.

PD September 1991. **TI** Tax Exporting, Federal Deductibility, and State Tax Structure. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3839; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 17. **PR** $3.00. **JE** H21, H71. **KW** Taxation. Tax System. Sales Tax.

AB This paper studies the interaction between the federal and state tax systems during the 1980's and in particular considers how the Tax Reform Act of 1986 affected state tax structure. Using a panel data set on state governments over a nine year period, I estimate tax share equations for six categories of taxes. I find that the state personal income tax is sensitive to changes in its tax price but find a much smaller sensitivity to changes in tax prices for the general sales tax. I then consider various reasons for why the sales tax does not exhibit a sensitivity to changes in tax price and consider the implications of these results for policy-makers.

PD November 1991. **TI** The Role of Federal Taxation in the Supply of Municipal Bonds: Evidence from Municipal Governments. **AA** Princeton University. **SR** National Bureau of Economic Research Working Paper: 3891; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 19. **PR** $3.00. **JE** H73, E62, H74. **KW** Local Government. Tax System. Community. Bonds. Borrowing.

AB This paper considers ways in which federal tax policy affects municipal asset and debt holdings. The tax treatment of municipal bonds and income creates an arbitrage opportunity for communities to issue tax exempt debt and invest in financial assets. I present evidence that suggests the rules in effect prior to 1986 to prevent this activity were not effective. I then develop and estimate a model of municipal bond supply. I find a semi-elasticity of 1.23 of long term debt with respect to the spread between the after tax rate of return and the municipal borrowing rate.

Meyer, Bruce D.

TI A Longitudinal Analysis of Young Entrepreneurs in Australia and the United States. **AU** Blanchflower, David G.; Meyer, Bruce D.

Milesi-Ferretti, Gian Maria

PD November 1991. **TI** Do Good or Do Well? Public Debt Management in a Two-Party Economy. **AA** London School of Economics. **SR** London School of Economics Centre for Economic Performance Discussion Paper: 53; The Centre for Economic Performance, The London School of Economics and Political Science, Houghton Street, London WC2A 2AE, ENGLAND. **PG** 46. **PR** no charge. **JE** E42, H63, D72, D78. **KW** Inflation. Debt Management. Political Processes. Voting. Elections.

AB In this paper I show that a conservative government, while favorable in principle to the institution of binding policy rules, may rationally choose not to do so in the presence of electoral competition. The reason is that left-wing governments typically face more serious time inconsistency problems than right-wing ones, because of incentives to raise revenue through inflation or tax capital for distributional reasons. A binding rule may make the left-wing party more "credible" in the eyes of the voters; conversely, in the absence of rules, voters will favor the conservative party - for example, because of its stronger anti-inflationary preferences. I develop this idea in the context of a simple debt management model, in which the incumbent can decide whether to roll over a given amount of debt in nominal form or indexing debt to the price level. An election follows, and after the election the new government has to repay the debt using taxes and inflation, both assumed to be distortionary. The right-wing party attributes a higher weight to the inflation tax distortion than the left-wing party; the median voter's preferences are in between the two parties'. Also, both parties face a fixed cost of being out of power.

Miller, Marcus

TI Inflation Convergence with Realignments in a Two-Speed Europe. **AU** Lambertini, Luisa; Miller, Marcus; Sutherland, Alan.

Mills, Leonard

TI Have Regional Per-Capita Incomes Converged? **AU** Carlino, Gerald; Mills, Leonard.

Mishkin, Frederic S.

PD December 1991. **TI** Anatomy of a Financial Crisis. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3934; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** $3.00. **JE** E58, G18, E44, G14. **KW** Central Bank. Monetary Policy. Asymmetric Information. Moral Hazard. Adverse Selection. Financial Markets.

AB This paper provides an asymmetric information framework for understanding the nature of financial crises. It provides the following precise definition of a financial crisis: A financial crisis is a disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities. As a result, a financial crisis can drive the economy away from an equilibrium with high output in which financial markets perform well to one in which output declines sharply. The asymmetric information framework explains the patterns in the data and many features of these crises which are otherwise hard to explain. It indicates that financial crises have effects over and above those resulting from bank panics and therefore provides a rationale for an expanded lender-of-last resort role for the central bank in which the central bank uses the discount window to provide liquidity to sectors outside of the banking system.

Missale, Alessandro

PD December 1991. **TI** The Debt Burden and Debt Maturity. **AU** Missale, Alessandro; Blanchard, Olivier Jean. **AA** Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 3944; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 24. **PR** $3.00. **JE** H63, E58. **KW** Debt Management. Government Debt. Debt Maturity. Inflation.

AB At low and moderate levels of government debt, there appears to be little relation between the level of debt and its maturity. But at high levels of debt, a strong inverse relation emerges. We start the paper by documenting this inverse relation for those OECD countries which have reached very high levels of debt. We then provide a theory of the joint movements of debt and maturity which can explain both sets of facts. It is based on the idea that, at high levels of debt, the government may need to decrease the maturity of the debt as debt increases, in order to maintain the credibility of its anti-inflation stance.

Mitchell, Olivia S.

PD November 1991. **TI** Pension Funding in the Public Sector. **AU** Mitchell, Olivia S.; Smith, Robert S. **AA** Cornell University. **SR** National Bureau of Economic Research Working Paper: 3898; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 20. **PR** $3.00. **JE** G23, J33, J45, H55. **KW** Public Sector. Pensions. Pension Funding. Unions.

AB This paper explores the determinants of pension funding in the public sector. We formulate and test several hypotheses about the determinants of public employer pension funding practices, using a new data set describing financial and other characteristics of state, local, and teacher plans. The data show that, on average, public sector pension plans were relatively well-funded during the 1980's. There were, however, wide variations in funding practices in our sample. Our analysis of these variations suggests that past funding practice tends to be perpetuated, that unionized employers are less likely to fully fund future pension obligations, and that funding is sensitive to fiscal pressure.

Mocan, Naci

TI The Consequences and Costs of Maternal Substance Abuse in New York City: A Pooled Time-Series, Cross-Section Analysis. **AU** Joyce, Theodore; Racine, Andrew D.; Mocan, Naci.

Moffitt, Robert

TI A Structural Model of Multiple Welfare Program Participation and Labor Supply. **AU** Keane, Michael; Moffitt, Robert.

Montgomery, Edward

PD January 1992. **TI** Pensions and Wage Premia. **AU** Montgomery, Edward; Shaw, Kathryn. **AA** Montgomery: University of Maryland, College Park and National Bureau of Economic Research. Shaw: Carnegie Mellon University. **SR** National Bureau of Economic Research Working Paper: 3985; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** J32, J33, J51. **KW** Compensating Differentials. Unions. Fringe Benefits. Pensions.

AB In this paper we use the theory of compensating differentials to identify sources of heterogeneity in firms' costs of providing fringe benefits and hence heterogeneity in the magnitude of the compensating differential. We estimate the relationship between pensions and wages controlling for variations in the size of the compensating differential related to firm size or the presence of a union. Both firm size and unionism are commonly associated with the payment of wage premia and/or the presence of market power where the costs of fringe benefits to the firm may be less. Our results are consistent with these a priori expectations and suggest that the magnitude of the compensating differential is significantly higher in nonunion and in small firms.

Montiel, Peter J.

TI An Empirical "Dependent Economy" Model for Pakistan.
AU Haque, Nadeem U.; Husain, Aasim M.; Montiel, Peter J.

Moore, Geoffrey H.

PD December 1989. **TI** Business Cycles and Inflation Cycles in the Market-Oriented World. **AU** Moore, Geoffrey H.; Klein, Philip A. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-29; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 49. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** E32, F41, O57, F43. **KW** Business Cycle. Recession. Economic Growth. Inflation.

AB The major findings of the research program reported in this paper are as follows: (1) Growth cycles, which are sustained fluctuations in real economic activity around long-run trends, have been found in every one of the seventeen industrialized market-oriented economies that have been studied. (2) Leading, coincident and lagging indicators, developed on a comparable plan for ten individual countries and three major regions, show that the same types of leading indicators give early warnings of recession or recovery in every country, whether newly industrialized or not. (3) Major swings in the rate of inflation are associated with growth cycles. Peaks in the rate of inflation usually occur a few months after the peak in the growth cycle (that is, when the growth rate in real economic activity first falls below the long-run trend rate). (4) Warning signals of growth cycle turns as well as inflation cycle turns can be obtained from growth rates in the leading and coincident indexes. (5) The leading indexes are also useful in forecasting the demand for imports and exports. Tests of this proposition have been conducted for both developed and developing market economics.

TI Indicators of Credit Quality in Thrift Industry Lending.
AU Cullity, John P.; Moore, Geoffrey H.

PD January 1991. **TI** Leading Indicators for the Semiconductor Business. **AU** Moore, Geoffrey H.; Krell, Roberto. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-31; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 6. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** L63. **KW** Forecasting. Regional Demand. Microelectronics.

AB In this report we use leading economic indexes to forecast semiconductor sales for the world and each economic region. We ran correlations between the regional unit sales growth rates and individual country or regional long-leading indexes. In every case studied the best results were obtained by correlating regional sales in units with the U.S. long-leading index. In order to understand this situation, we have taken a look at the factors behind the demand for semiconductors worldwide and how those factors vary for each region.

TI Forecasting Exports from Eastern Europe Using Leading Indicators. **AU** Cullity, John P.; Moore, Geoffrey H.

TI Monitoring Economic Activity in Newly Privatized Economies: Statistical Targets for Eastern Europe. **AU** Klein, Philip A.; Moore, Geoffrey H.

Moore, John

TI A Theory of Debt Based on the Inalienability of Human Capital. **AU** Hart, Oliver; Moore, John.

Moore, Michael J.

PD January 1992. **TI** Monetary Policy in Stage Two of EMU. **AU** Moore, Michael J.; O'Connell, Thomas. **AA** Moore: Queen's University. O'Connell: Central Bank of Ireland. **SR** Centre for Economic Policy Research Discussion Paper: 616; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 29. **PR** 3 Pounds ($5.00). **JE** F33, F42, E52, E58, F36. **KW** Monetary Union. Europe. Monetary Policy. Budget Deficit.

AB As Stage Two of European Monetary Union (EMU) in Europe develops, a major issue is the coordination of monetary policies. Member countries of the European Monetary System (EMS) will have to align their domestic source moneys. This paper argues that for this purpose, the Treasury and central bank in each country needs to be consolidated. The implications of this are that external financing of budget deficits becomes part of domestic money creation. This concept is set in a steady-state version of the Girton-Roper framework for the monetary approach to the balance of payments. The theory is tested for a number of European countries using the Johansen procedure.

Morck, Randall

TI Income Shifting in U.S. Multinational Corporations. **AU** Harris, David; Slemrod, Joel; Yeung, Bernard; Morck, Randall.

Morrison, Catherine J.

PD January 1992. **TI** State Infrastructure and Productive Performance. **AU** Morrison, Catherine J.; Schwartz, Amy Ellen. **AA** Tufts University. **SR** National Bureau of Economic Research Working Paper: 3981; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O47, D24, H54, L52. **KW** Productivity Growth. Public Investment. Industrial Policy.

AB The impact of public infrastructure investment on the productive performance of firms has been an important focus of the recent literature on productivity growth. The size of this impact has important implications for policy-makers' decisions to invest in public capital, and productivity analysts' evaluation of productivity growth fluctuations and declines. However, detailed evaluation of the infrastructure impact is difficult using existing studies which rely on restricted models of firms' technology and behavior. In this paper we construct a more complete production theory model of firms' production and input decisions. We then apply our framework to state-level data on the output production and input (capital, non-production and production labor, and energy) use of manufacturing firms to evaluate the contribution of infrastructure to firms' costs and productivity growth. We find that infrastructure investment does provide a significant direct benefit to manufacturing firms and thus augments productivity growth.

Mortensen, Dale T.

PD February 1991. **TI** Information Sources and Equilibrium Wage Outcomes. **AU** Mortensen, Dale T.; Vishwanath, Tara. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 948; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 27. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** J64, J31. **KW** Job Search. Wage Determination. Search Information.

AB Workers seek information from a variety of sources when searching for a job and workers of different sex and race use different search method mixes. Although one expects that the method combinations actually used reflects a comparison of relative net returns as Holzer (1988) argues, the gross returns of the different information sources used is endogenous to the market - - a fact that has not been fully appreciated in the theoretical literature on equilibrium wage determination in search markets. The principal purpose of this study is to derive the equilibrium effects of different mixes of the two information sources that workers most commonly use, direct application to employers and indirect contact through friends and relatives. As an implication of the analysis, we find that systematic differential in the use of and access to information sources across identifiable worker types does induce predictable differentials in equilibrium wage outcomes.

Mullahy, John

PD November 1991. **TI** Alcoholism, Work, and Income over the Life Cycle. **AU** Mullahy, John; Sindelar, Jody L. **AA** Mullahy: Trinity College and National Bureau of Economic Research. Sindelar: Yale University. **SR** National Bureau of Economic Research Working Paper: 3909; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 18. **PR** $3.00. **JE** I12, J26, J22, J21. **KW** Health. Employment. Substance Abuse. Alcohol Abuse.

AB We find that alcoholism decreases labor force participation among prime age males, and therefore decreases the income of this group. The effects of alcoholism on the labor

https://doi.org/10.1017/S0951007900002576 Published online by Cambridge University Press

force participation of younger and older males and on the wage rates of prime age males are not significantly positive. We also find that alcoholism affects income indirectly through its effects on individual characteristics such as schooling and marital status, as well as directly through labor force participation rates after controlling for these indirect effects.

Mulligan, Casey B.

PD November 1991. **TI** A Note on the Time-Elimination Method for Solving Recursive Dynamic Economic Models. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier. **AA** Mulligan: Chicago. Sala-i-Martin: Yale University. **SR** National Bureau of Economic Research Technical Paper: 116; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge MA 02138. **PG** not available. **PR** $3.00. **JE** C61, O41, C63. **KW** Dynamic Programming. Growth Models. Computer Algorithm.
AB The Time-Elimination Method for solving recursive dynamic economic models is described. By defining control-like and state-like variables, one can transform the equations of motion describing the economy's evolution through time into a system of differential equations that are independent of time. Unlike the transversality conditions, the boundary conditions for the system in the state-like variable are not asymptotic boundary conditions. In theory, this reformulation of the problem greatly facilitates numerical analysis. In practice, problems which were impossible to solve with a popular algorithm - shooting - can be solved in short order. The reader of this paper need not have any knowledge of numerical mathematics or dynamic programming or be able to draw high dimensional phase diagrams, only a familiarity with the first order conditions of the "Hamiltonian" method for solving dynamic optimization problems is required. The most natural application of Time-Elimination is to growth models. The method is applied here to three growth models: the Ramsey/Cass/Koopmans one sector model, Jones & Manuelli's (1990) variant of the Ramsey model, and a two sector growth model in the spirit of Lucas (1988). A very simple -but complete - computer program for numerically solving the Ramsey model is provided.

PD January 1992. **TI** Transitional Dynamics in Two-Sector Models of Endogenous Growth. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier. **AA** Mulligan: University of Chicago. Sala-i-Martin: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3986; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O41. **KW** Growth Rate. Production. Endogenous Growth.
AB The steady state and transitional dynamics of two-sector models of endogenous growth are analyzed in this paper. We describe necessary conditions for endogenous growth. The conditions allow us to reduce the dynamics of the solution to a system with one state-like and two control-like variables. We analyze the determinants of the long-run growth rate. We use the Time-Elimination Method to analyze the transitional in real time if the point-in-time production possibility frontier is strictly concave which occurs, for example, if the two production functions are different or if there are decreasing point-in-time returns in any of the sectors.

Murphy, Kevin J.

TI Optimal Incentive Contracts in the Presence of Career Concerns: Theory and Evidence. **AU** Gibbons, Robert; Murphy, Kevin J.

TI Changes in Relative Wages, 1963-1987: Supply and Demand Factors. **AU** Katz, Lawrence F.; Murphy, Kevin J.

Myerson, Roger B.

PD September 1991. **TI** Effectiveness of Electoral Systems for Reducing Government Corruption: A Game-Theoretic Analysis. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 956; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 15. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** D72, K14. **KW** Corruption. Voting Behavior. Political System. Legislature.
AB A theoretical model is developed for predicting the relative effectiveness of different electoral systems for reducing government corruption. We consider voting games in which parties with known corruption levels and known positions on a major policy question are competing for legislative seats. We find that approval voting and proportional representation are fully effective, in the sense that all equilibria exclude corrupt parties from winning seats. Plurality voting is partly effective, in the sense that there always exist some equilibria that exclude corrupt parties. Borda voting is ineffective because, for some political situations, no equilibria can guarantee the exclusion of corrupt parties.

TI An Experiment on Coordination in Multi-Candidate Elections: The Importance of Polls and Election Histories. **AU** Forsythe, Robert; Myerson, Roger B.; Rietz, Thomas; Weber, Robert.

Nadiri, M. Ishaq

PD October 1991. **TI** The Effects of Public Infrastructure and R&D Capital on the Cost Structure and Performance of U.S. Manufacturing Industries. **AU** Nadiri, M. Ishaq; Mamuneas, Theofanis P. **AA** Nadiri: National Bureau of Economic Research and New York University. Mamuneas: New York University. **SR** New York University Economic Research Reports: 91-57; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 35. **PR** no charge. **JE** D24, H54, H41, H42, L60. **KW** Manufacturing. Productivity. Public Goods. Externality. Infrastructure.
AB In this paper the authors examine the effects of publicly financed infrastructure and R&D capitals on the cost structure and productivity performance of twelve two-digit U.S. manufacturing industries. The results suggest that there are significant productive effects from these two types of capital. Their effects on the cost structure vary across industries and their contributions to growth of labor productivity vary over time as well. Not only is the cost function shifted downward in each industry, generating productivity inducement, but the factor demand in each industry is also affected by the two types of public capitals, suggesting bias effects. The authors also calculate the marginal benefits of these services in each industry and estimate the "social" rates of return to these capitals for the industries in their sample.

TI The Structure of Production, Technical Change and Efficiency in a Multiproduct Industry: An Application to U.S. Airlines. **AU** Good, David H.; Nadiri, M. Ishaq; Sickles, Robin C.

Neumann, Manfred J. M.

PD September 1991. **TI** German Unification: Economic Problems and Consequences. **AA** University of Bonn. **SR** Centre for Economic Policy Research Discussion Paper: 584; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 3 pounds ($5.00). **JE** O52, L33, O11. **KW** Germany. Economic Reform. Inflation. Privatization.

AB Economic unification forced an unprecedented adjustment crisis on the East German economy. The revolutionary shock of the transformation of the economic order was reinforced by a real appreciation shock exceeding 50% due to the immediate introduction of the Deutschmark. This paper examines in detail the real and monetary consequences of unification. It is shown that the currency conversion created (by means of an excessive money endowment) a potential for price level rise of between 3.7% and 6.6% for 1991. With industrial production down by 50% and effective unemployment exceeding 20%, large-scale public transfers from West to East Germany are unavoidable. The 1991 transfers are estimated to reach 73% (6%) of East (West) German GNP. Most of this will finance consumption The paper also estimates the capital gap. With about 70% of the East German capital stock obsolete, the maximum gap is DM 1.8 trillion. The actual gap and the resulting adjustment load on the global saving-investment balance are likely to be much smaller. A major conclusion is that speeding up the process of enterprise privatization is the most pressing issue.

Newbery, David M.

PD August 1991. **TI** Sequencing the Transition. **AA** Cambridge University. **SR** Centre for Economic Policy Research Discussion Paper: 575; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 31. **PR** 3 pounds ($5.00). **JE** P42, P47, P41. **KW** Communism. Monopoly. Production. Economic Reform.

AB The inefficiency of Soviet-type economies results from their monopolized production structure, which makes soft budget constraints almost inevitable, as enterprises have bargaining power and must face expropriative tax rates for macroeconomic stability. Systemic reform aims to improve incentives, and if this is to be achieved with macro-stability, enterprises must be demonopolized. Most sequencing issues resolve into three key concerns: ensuring or restoring macroeconomic stability; not ruling out options for subsequent reforms, specifically those intended to increase competition; and maintaining support for completing the reform process.

Newlon, T. Scott

TI The Effects of U.S. Tax Policy on the Income Repatriation Patterns of U.S. Multinational Corporations. **AU** Altshuler, Rosanne; Newlon, T. Scott.

Nickell, Stephen J.

PD October 1991. **TI** Wages, Unemployment and Population Change. **AA** University of Oxford. **SR** Oxford Applied Economics Discussion Paper: 122; Institute of Economics and Statistics, St. Cross Building, Manor Road, Oxford OX1 3UL, ENGLAND. **PG** 32. **PR** 1 pound. **JE** J21, J64, E24, J11. **KW** Unemployment. Demographics. Labor Force. Population Growth.

AB This paper is concerned with the short and long-run relationship between the growth in the population of working age, the growth of the labor force and the level of unemployment. We set a theoretical framework in which the rate of growth of the working age population can systematically influence the rate of unemployment. The way in which this occurs is related to hysteresis effects in both price and wage setting. However, our empirical investigations on a wide variety of countries elucidated no evidence of any systematic relationship between population growth or labor force growth and unemployment.

O'Connell, Thomas

TI Monetary Policy in Stage Two of EMU. **AU** Moore, Michael J.; O'Connell, Thomas.

Obstfeld, Maurice

PD December 1991. **TI** The Adjustment Mechanism. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3943; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 62. **PR** $3.00. **JE** F21, F33, F31, F42, E42. **KW** Capital Mobility. Capital Flows. Exchange Rate. Gold Standard. Current Account.

AB This paper studies the mechanisms of international payments adjustment at work under the Bretton Woods system of fixed exchange rates, 1945 to 1971. I argue that two market failures, imperfect international capital mobility and imperfect wage-price flexibility, are central to understanding the adjustment problems of that period. Imperfect capital mobility implied that even intertemporally solvent governments could face international liquidity constraints. Wage-price inflexibility implied that countries suffering from simultaneous reserve loss and unemployment might need to undergo lengthy transitions before returning to balance. By the 1960's, when trade had been substantially liberalized and partial convertibility restored the main remaining adjustment weapon was currency realignment: devaluation could eliminate an unemployment - cum - deficit dilemma in a stroke, while revaluation could relieve the inflationary pressures in surplus countries. The currency-realignment option proved incompatible with the growing efficiency of the international capital market, however. Under the classical gold standard, high capital mobility had supported the credibility of fixed exchange rates. Under Bretton Woods fixed gold parities did not have primacy among other economic objectives; and increasing capital mobility undermined the regime as governments proved unwilling to stand by key systemic commitments.

Okojie, Christiana E.

PD February 1990. **TI** Women's Status and Fertility in Bendel State of Nigeria. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 597; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 30. **PR** $2.00 + postage. **JE** J13, I12, J11, O18, O55. **KW** Developing Countries. Fertility. Mortality. Africa. Education.

AB SubSaharan Africa lags behind other developing regions in the demographic transition during which the regime of high fertility and mortality changes to one in which both stabilize at much lower levels. This paper reports empirical evidence on socioeconomic fertility differentials from a 1985 sample of 15 rural and urban communities in Bendel State of Nigeria. A review of the literature on female status and fertility explores distinctions between the economic framework of fertility determinants, based on factors affecting market productivity or "public status," and the sociological framework that emphasizes intra-family relationships that determine "private status" of women and men. Among the factors that are particularly important in accounting for fertility differences in this survey are female education which decreased completed fertility, and husband education which increases fertility. The effects on fertility of these human capital endowments of women and men is not particularly sensitive to whether one controls for the still important fertility differences associated with ethnic/tribal/religious groups.

Olley, G. Steven

PD January 1992. **TI** The Dynamics of Productivity in the Telecommunications Equipment Industry. **AU** Olley, G. Steven; Pakes, Ariel. **AA** Olley: New York University. Pakes: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3977; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** L51, L96, O33. **KW** Technological Change. Deregulation.

AB Technological change and deregulation have caused a major restructuring of the telecommunications equipment industry over the last two decades. We estimate the parameters of a production function for the equipment industry and then use those estimates to analyze the evolution of plant level productivity over this period. The restructuring involved significant entry and exit and large changes in the sizes of incumbents. Since firms' choices on whether to liquidate and on the quantities of inputs demanded should they continue depend on their productivity, we use an equilibrium model to suggest an estimation algorithm that takes into account the relationship between productivity on the one hand, and both input demand and survival on the other. A fully parametric version of the estimation algorithm would be both computationally burdensome and require a host of auxiliary assumptions. We develop a semiparametric technique which is both consistent with a quite general version of the theoretical framework and easy to use. We find an increase in the rate of industry productivity growth after deregulation.

Oneal, John R.

PD November 1991. **TI** The Monetary Value of Conscription. **AA** Stanford University and University of Alabama. **SR** Stanford Hoover Institute Working Paper in Economics: E-91-9; Domestic Studies Program Working Paper Series, Hoover Institution, Stanford University, Stanford, CA 94305. **PG** 39. **PR** not available. **JE** H56. **KW** National Security. NATO. Defense Expenditures. Conscription.

AB Burden sharing in NATO has been a topic of interest to policy-makers and academics since the early years of the alliance, but the validity of comparisons involving the allies' defense expenditures is limited by differences in the means by which they recruit personnel. Generally, it is argued that countries that employ conscription make a hidden contribution to allied security. Building primarily on the work of van Ypersele de Strihou (1967), this paper reports estimates of the monetary value of conscription for eight NATO countries for 1974 and 1981 and six of these allies for 1987. On average, the value of conscription as a percentage of a nation's military expenditures equaled 9.2 percent in 1974, 6.5 percent in 1981, and 5.7 percent in 1987. Alternative specifications for calculating conscription's implicit value are considered.

Ormerod, Paul

TI Is There an "EMS" Effect in European Labour Markets? **AU** Artis, Michael J.; Ormerod, Paul.

Ostroy, Joseph M.

PD September 1991. **TI** Non-Atomic Economies and the Boundaries of Perfect Competition. **AU** Ostroy, Joseph M.; Zame, William R. **AA** Ostroy: University of California, Los Angeles. Zame: University of California, Los Angeles, and John Hopkins University. **SR** University of California at Los Angeles Department of Economics Working Paper: 502; Department of Economics, University of California at Los Angeles, 405 Hilgard Ave., Los Angeles, CA 90024. **PG** 42. **PR** $2.50; checks payable to U.C. Regents. **JE** D51, D41. **KW** Perfect Competition. Equilibrium Allocations. Walrasian Equilibrium.

AB This paper explores the distinction between nonatomicity and thick markets as the source of perfect competition. The focus of the paper is the construction of a model of an imperfectly competitive economy with a non-atomic continuum of traders and a continuum of differentiated commodities, for which Walrasian equilibria exist. The failure of perfect competition in this instance can be identified in two ways: individuals can affect prices and the core is strictly larger than the set of Walrasian allocations. By contrast, it is shown that, when markets are physically or economically thick (or both), then individuals cannot affect prices and the core coincides with the set of Walrasian allocations.

Ostry, Jonathan D.

PD October 1991. **TI** Private Saving and Terms of Trade Shocks: Evidence from Developing Countries. **AU** Ostry, Jonathan D.; Reinhart, Carmen M. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/100; International Monetary Fund, Washington, DC 20431. **PG** 19. **PR** not available. **JE** F32, F41, O57, E21. **KW** Current Account. Savings. Trade Shocks. Developing Countries.

AB This paper examines the relationship between temporary terms of trade shocks and household saving in developing countries. It is first shown that, from a theoretical standpoint, this relationship is ambiguous: private saving may rise or fall in response to a transitory terms of trade shock, depending on the values of the intertemporal elasticity of substitution and the intratemporal elasticity of substitution between traded and non-traded goods. Empirical estimates of these two parameters are obtained using data from a sample of 13 developing countries, and then used to draw implications for the response of private saving to transitory terms of trade shocks.

Oswald, Andrew

TI What Makes an Entrepreneur? **AU** Blanchflower, David G.; Oswald, Andrew.

Ozler, Sule

PD July 1991. **TI** External Debt and Political Instability.

AU Ozler, Sule; Tabellini, Guido. **AA** Ozler: Harvard University and National Bureau of Economic Research. Tabellini: Innocenzo Gasparini Institute for Economic Research and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3772; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F34, F43, O19. **KW** Developing Countries. External Debt. Credit Rationing. Public Debts.

AB This paper studies theoretically and empirically the role of domestic political incentives in the accumulation of large external debts by developing countries during 1972-81. The theoretical model characterizes two equilibrium regimes. In one regime the borrower is on its demand curve and changes in the loan size demand are accommodated by the lenders. In the other regime the borrower is credit rationed, and the loan size is determined by the perceived country risk. Higher political instability increases the equilibrium loan size in the first regime and decreases it in the second. Using out-of-sample evidence, we identify the two regimes in the data. We then find that in the unconstrained regime political instability has a significant positive effect on the loan size, whereas it has no significant effect in the credit rationing regime. Hence the evidence indicates a positive effect of political instability on the demand for sovereign loans, as predicted by the theory.

PD October 1991. **TI** External Debt and Political Instability. **AU** Ozler, Sule; Tabellini, Guido. **AA** University of California, Los Angeles. **SR** Centre for Economic Policy Research Discussion Paper: 582; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 3 pounds ($5.00). **JE** F34, F21, O57. **KW** Developing Countries. External Debt. Politics. Political Economy. Investment.

AB This paper provides a theoretical and empirical analysis of the role played by domestic political incentives in the accumulation of large external debts by developing countries between 1972 and 1981. The theoretical model characterizes two equilibrium regimes. In one the borrower is on its demand curve and changes in the loan size desired by the borrower is credit rationed, and the loan size is determined by the perceived country risk. Increased political instability increases the equilibrium loan size in the first regime and decreases it in the second. Using out-of-sample evidence, we identify the two regimes in the data. We then find that in the unconstrained regime political instability has a significant effect on the loan size, whereas it has no significant effect in the credit rationing regime. Hence the evidence indicates a positive effect of political instability on the demand for sovereign loans, as predicted by the theory.

PD January 1992. **TI** Have Commercial Banks Ignored History? **AA** University of California, Los Angeles and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3959; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F34, O19. **KW** Developing Countries. Sovereign Debt.

AB This paper investigates the impact of past defaults, and of recently cquired sovereignty on the terms of bank loans for developing countries in he 1970's. We control for countries; repayment indicators and for a measure f their political stability. Our findings are that: 1) The repayment ifficulties of the period prior to the 1930's do not have a statistically ignificant impact on the credit terms. In contrast, the defaults of the 930's and the post war defaults and repayment difficulties do have a tatistically significant impact on credit terms. These findings are in ontrast to those studies that focused on crises periods in these markets. ur results suggest that countries' repayment behavior influence their later arket access. 2) Nations that achieved sovereignty recently were charged igher rates that nations that were sovereign before the 1940's. In fact, ecently sovereign borrowers were charged as high rates as the defaulters of he former episodes. This finding suggests that markets attach risk premium or new institutions.

PD January 1992. **TI** External Shocks, Politics, and Private Investment: Some Theory and Empirical Evidence. **AU** Ozler, Sule; Rodrik, Dani. **AA** Ozler: University of California, Los Angeles and National Bureau of Economic Research. Rodrik: Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3960; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 25. **PR** $3.00. **JE** O18, O17, O11. **KW** Developing Countries. Urban Analysis. Investment. Political System.

AB The manner in which the political system responds to external economic shocks in developing countries is a key determinant of the private investment response. We look at a simple model of political-economic equilibrium to make this intuition more precise, and develop the idea of a "political transmission mechanism." Even in the confines of this simple model, we find that ambiguities abound: domestic politics can magnify or dampen the effect of the external shock. In our empirical work, we find that a high level of urbanization magnifies the investment reduction in response to an external shock. This is consistent with the supposition that high levels of urbanization are conducive to distributive politics with pernicious economic effects. We also find that the provision of political rights is conducive to superior private investment behavior.

PD January 1992. **TI** Bank Exposure, Capital and Secondary Market Discounts on Developing Country Debt. **AU** Ozler, Sule; Huizinga, Harry. **AA** Ozler: University of California, Los Angeles and National Bureau of Economic Research. Huizinga: Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3961; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** $3.00. **JE** O16, F34, O19, G21. **KW** Developing Countries. Secondary Market. Discounts. Banking. Deposit Insurance.

AB Previous empirical studies of secondary market discounts for developing countries have ignored important creditor country factors. The empirical evidence in this paper indicates that, after controlling for repayment indicators of borrower countries, bank exposure and capital are important determinants of secondary market discounts: an increase in the exposure of large banks to a particular country leads to a decrease in the secondary market discounts on the debt of that country, while an increase in the capital of large banks leads to an increase in secondary market discounts. Among the repayment indicators of developing countries, only debt ratios are found to be significant determinants of the discounts. We suggest that the impacts of exposure and capital can be explained by the presence of deposit insurance. The evidence presented on the stock market pricing of lender banks supports this view.

Pagano, Marco

PD October 1991. **TI** Information Sharing in Credit Markets. **AU** Pagano, Marco; Jappelli, Tullio. **AA** Pagano: Innocenzo Gasparini Institute for Economic Research. Jappelli: Universita di Napoli. **SR** Centre for Economic Policy Research Discussion Paper: 579; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 29. **PR** 3 pounds ($5.00). **JE** G21, P52, D12. **KW** Consumer Loans. Borrowing. Commercial Banks. Credit.

AB We present a model with adverse selection where information sharing between lender arises endogenously. Lenders' incentives to share information about borrowers are positively related to the mobility and heterogeneity of borrowers, to the size of the credit market and to advances in information technology; on the other hand, such incentives are reduced by the fear of competition from potential entrants. In addition, information sharing increases the volume of lending when adverse selection is so severe that safe borrowers drop out of the market. These predictions are supported by international and historical evidence in the context of the consumer credit market. Information sharing is widespread in countries, such as Japan, the United Kingdom and the United States, where the geographical mobility of households is high and the consumer credit market is deep; while in countries with low mobility and thin consumer credit markets, e.g. Belgium and Italy, information sharing is minimal. The same predictions are also supported by U.S. historical data.

Page, Scott E.

PD November 1991. **TI** We'd Rather Fight than Switch: Trying to Understand "Let's Make a Deal". **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 968; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 21. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** D81. **KW** Uncertainty. Decision-Making. Decision Theory.

AB This paper examines the traditional "Let's Make a Deal" problem as well as a family of similar problems. It introduces a possible bias in decision-making that may lead to the common mistake in "Let's Make a Deal" and summarizes the results of experiments testing this bias. As will be elaborated in the paper, the "Let's Make a Deal" problem strikes a mathematical nerve in a predominantly innumerate world. Debates over its solution enliven mathematicians, probabilists, decision scientists and lay persons alike.

Pakes, Ariel

PD January 1992. **TI** Computing Markov Perfect Nash Equilibria: Numerical Implications of a Dynamic Differentiated Product Model. **AU** Pakes, Ariel; McGuire, Paul. **AA** Yale University. **SR** National Bureau of Economic Research Technical Paper: 119; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** C15, D41, L11. **KW** Dynamic Models. Algorithm. Nash Equilibrium. Market Structure. Product Markets.

AB This paper provides an algorithm for computing Markov Perfect Nash Equilibria (Maskin and Tirole, 1988 for dynamic models that allow for heterogeneity among firms and idiosyncratic (or firm specific) sources of uncertainty. It has two purposes. To illustrate the ability of such models to reproduce important aspects of reality, and to provide a tool which can be used for both descriptive and policy analysis in a framework rich enough to capture many of the features of firm level data sets (thereby enabling it to be integrated with the empirical detail in those data sets). We illustrate by computing the policy functions, and simulating the industry structures, generated by a class of dynamic differentiated product models in which the idiosyncratic uncertainty is due to the random outcomes of each firms' research process (we also allow for an autonomous aggregate demand process). The illustration focuses on comparing the effects of different regulatory and institutional arrangements on market structure and on welfare for one particular set of parameter values.

TI The Dynamics of Productivity in the Telecommunications Equipment Industry. **AU** Olley, G. Steven; Pakes, Ariel.

Papke, Leslie E.

PD December 1991. **TI** Tax Policy and Urban Development: Evidence from an Enterprise Zone Program. **AA** Michigan State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3945; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** $3.00. **JE** R58, E22, E24, H71. **KW** Government Spending. Unemployment. Investment. Regional Economics. State Government.

AB In the last decade, most states have targeted certain depressed areas for revitalization by providing a combination of labor and capital tax incentives to firms operating in the "enterprise zone" (EZ). Despite the large number of state initiatives, and the frequent re-introduction of federal EZ legislation, there have been few statistical analyses of the effect of EZs apart from surveys of plan administrators. This paper analyzes the effect of the Indiana EZ program on local employment and investment using a panel of local taxing jurisdictions. In 1988, the direct budgetary costs of the Indiana program totaled over $11 million, averaging $13,933 per participating firm, $4,564 per new job, and $31,113 per new zone resident job. I estimate that zone designation initially reduces the value of depreciable personal property by about 13 percent, but also reduces unemployment claims in the zone and surrounding community by 19 percent. Both estimates are statistically significant. The value of inventories in Indiana zones is 8 percent higher than it otherwise would be, and the estimated effect is marginally statistically significant.

Passmore, Wayne

PD November 1991. **TI** Can Retail Depositories Fund Mortgages Profitably? **AA** Board of Governors of the Federal Reserve Board. **SR** Board of Governors of the Federal Reserve. System Finance and Economics Discussion Series: 175; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 24. **PR** no charge. **JE** G21, R31. **KW** Banking. Loans. Mortgages.

AB Can fixed-rate, conforming mortgages be funded profitably using retail deposits gathered by an efficient, depository institution? This paper indicates that funding mortgages yields, at best, break even returns and, at worst, significant losses. However, this paper also suggests that efficient depositories can increase profits by securitizing mortgages and by not expanding mortgage lending beyond available retail funds. Making securitized mortgages is more profitable because bank regulators have a lower capital requirement for such mortgages, while constrained mortgage lending is more profitable because retail funds are significantly cheaper than other sources of funding. But only efficient depository institutions making low risk mortgages benefit from these strategies, suggesting that most depositories should seek other investments.

Pearson, Neil D.

PD June 1991. **TI** An Empirical Examination of the Cox, Ingersoll, and Ross Model of the Term Structure of Interest Rates. **AU** Pearson, Neil D.; Sun, Tong-sheng. **AA** Pearson: University of Rochester. Sun: Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-24; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 19. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** E43. **KW** Interest Rate. Term Structure.

AB We use the method of maximum likelihood to estimate and test a two-factor interest rate model due to Cox, Ingersoll, and Ross (1985) (CIR). Our approach utilizes the conditional density of the unobservable state variables through bond price formula and incorporates cross-sectional information by "disturbances." The CIR model is extended so that the likelihood ratio test can be applied. We reject the CIR model because it cannot accommodate the rather volatile movement of the yield curve. Based on its poor performance in prediction, we also conclude that the extended model fails to provide a good description of Treasury markets.

Peled, Dan

TI Searching for Investment Opportunities: A Micro Foundation for Endogenous Growth. **AU** Bental, Benjamin; Peled, Dan.

TI Optimal Capital Income Taxation and Long Run Debt with Borrowing Constraints. **AU** Aiyagari, S. Rao; Peled, Dan.

Perraudin, W. R. M.

PD September 1991. **TI** Imperfect Capital Markets, Heterogeneous Investors and the Demand for Risky Assets. **AU** Perraudin, W. R. M.; Sorensen, B. E. **AA** Perraudin: University of Cambridge. Sorensen: Brown University. **SR** Brown University Department of Economics Working Paper: 91-28; Department of Economics, Brown University, Providence, Rhode Island 02912. **PG** 30. **PR** no charge. **JE** G11, D12. **KW** Portfolio Choice. Consumer Economics. Investment.

AB This paper examines the effect of different wealth levels, non-marketed asset holdings, and demographic characteristics upon household portfolios. We model the fact that households typically have zero holdings of most assets by assuming monitoring costs that vary across portfolios. For each choice of portfolio composition, asset demands are derived by applying Roy's identity to a parameterized indirect utility function. Econometrically our approach is a generalization of methods developed in a different context by Dubin and McFadden (1984). Using data from the 1983 Survey of Consumer Finances, we find that demographic characteristics strongly influence agents' decisions regarding which assets to include in their portfolios and how much to hold. We also find that asset demands depend in a distinctly nonlinear way upon the level of financial wealth.

Perron, Pierre

TI Pitfalls and Opportunities: What Macroeconomists Should Know about Unit Roots. **AU** Campbell, John Y.; Perron, Pierre.

Persson, Torsten

PD August 1991. **TI** Is Inequality Harmful for Growth? Theory and Evidence. **AU** Persson, Torsten; Tabellini, Guido. **AA** Persson: Stockholm University. Tabellini: University of California, Los Angeles. **SR** Centre for Economic Policy Research Discussion Paper: 581; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 36. **PR** 3 pounds ($5.00). **JE** D31, H31, O41, N11. **KW** Income Distribution. Economic Growth. Political Economy. Politics.

AB Is inequality harmful for growth? We suggest that it is. In a society where distributional conflict is important, political decisions are likely to produce economic policies that allow private individuals to appropriate less of the returns to activities which promote growth, such as the accumulation of capital and productive knowledge. In this paper we formulate a theoretical model that formally captures this idea. The model has a politico-economic equilibrium, which determines a sequence of growth rates depending on structural parameters, political institutions and initial conditions. We then confront the model's testable empirical implications with two sets of data. The first data set pools historical evidence - dating back to the mid-nineteenth century - from the U.S. and eight European countries. A second data set contains post-war evidence from a broad cross-section of developed and less developed countries. In both samples we find a statistically significant and quantitatively important negative relation between inequality and growth. After a comprehensive sensitivity analysis, we conclude that our findings are not distorted by measurement error..

Pfahler, Wilhelm

TI Income Tax Progression and Redistributive Effect: The Influence of Changes in the Pre-Tax Income Distribution. **AU** Lambert, Peter J.; Pfahler, Wilhelm.

Pfleiderer, Paul

TI Divide and Conquer: A Theory of Intraday and Day-of-the-Week Mean Effects. **AU** Admati, Anat R.; Pfleiderer, Paul.

Pinto de Mendonca, Rosane Silva

TI Aggregating Inequalities: The Equalizing Impact of the Earnings of Married Women in Metropolitan Brazil. **AU** Barros, Ricardo; Pinto de Mendonca, Rosane Silva.

Podivinsky, Jan M.

PD August 1991. **TI** The Determinants of Labour-Managed Entry: Poisson Regression Models of U.K. Count Data. **AU** Podivinsky, Jan M.; Stewart, Geoff. **AA** University of Southampton. **SR** University of Southampton Discussion Paper in Economics and Econometrics: 9111; Department of Economics, University of Southampton, Southampton S09 5NH, ENGLAND. **PG** 22.

PR no charge. **JE** J54, L11, L22. **KW** Management Structure. Firm Organization. Industrial Organization. Labor-Managed Firms.
AB In a number of western economies the labor-managed sector has grown rapidly over the past decade, yet it remains small in relation to the total economy. Theoretical work on the distinction between capitalist and labor-managed production offers a variety of hypotheses but empirical analysis is largely absent. This paper addresses the issue using entry data. Specifically, we employ pseudo-maximum likelihood methods to estimate a Poisson regression of U.K. labor-managed entry counts on a set of industry level variables. Market concentration, risk and unionization are revealed to inhibit the formation of labor-managed enterprises. Comparisons are drawn with entry equations for capitalist firms.

Poterba, James M.

TI Which Households Own Municipal Bonds? Evidence from Tax Returns. **AU** Feenberg, Daniel R.; Poterba, James M.

PD December 1991. **TI** Why didn't the Tax Reform Act of 1986 Raise Corporate Taxes? **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3940; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 14. **PR** $3.00. **JE** H25, H22, K34, G32. **KW** Tax Reform. Corporate Profits. Corporate Taxes. Corporations.
AB The Tax Reform Act of 1986 was projected to raise corporate taxes by more than 120 billion over the 1986-1991 period. Actual federal corporate tax receipts in the last five years have fallen far short of these projections. This paper explores the factors that have contributed to this shortfall. The most important factor is lower-than-expected corporate profits. The underperformance of corporate profits can be attributed to three principal causes. First, the predicted rates of corporate profits when the 1986 Tax Reform Act was enacted were high by historical standards. The U.S. economy in the late 1980's did not experience total returns on corporate interest payments significantly higher, as a share of corporate operating income or GNP, in the late 1980's than in the years leading up to the Tax Reform Act. This reduced the corporate tax base, and may in substantial part ultimately be attributable to the marginal incentive effects for debt and equity finance provided in the 1986 Tax Reform Act. Third, also quite likely in reaction to the recent tax changes, the last few years have seen rapid growth in the income reported by Subchapter S corporations. This income is taxed under the individual income tax. The rise of S corporations has therefore contributed to the erosion of the corporate income tax.

PD January 1992. **TI** Taxation and Housing: Old Questions, New Answers. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3963; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 11. **PR** $3.00. **JE** H24, H21, R31. **KW** Tax Reform. Taxes. Tax Policy. Housing Markets. Home Ownership.
AB This paper sketches how the tax reforms of the 1980's affected the incentives and distortions associated with tax policy toward housing markets. There are three principal conclusions. 1) Reductions in marginal tax rates, particularly for high-income households, reduced tax-induced distortion in the user cost of owner-occupied housing. This lowered the deadweight losses associated with the favorable tax treatment of homeownership. 2) The increase in the standard deduction in the Tax Reform Act of 1986 (TRA86) removed several million middle-income homeowners who previously itemized from the ranks of itemizers. For these households TRA86 raised the marginal cost of owner-occupied housing. These changes also exacerbated the regressive nature of the mortgage interest subsidy. In 1988, more than half of the tax losses associated with mortgage interest deductions accrued to the 8% of taxpayers with the highest economic incomes. 3) TRA86 reduced incentives for rental housing investment, contributing to the decline in new multifamily housing starts from 500,000 per year in 1985 to less than 150,000 in 1991. In the long-run these policies will lead to higher rents.

Preston, Ian

PD April 1990. **TI** Ratios, Differences and Inequality Indices. **AA** Nuffield College and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/9; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 16. **PR** 3 pounds. **JE** D31, D12. **KW** Income Distribution. Income Inequality. Consumer Economics.
AB Inequality is concerned with gaps between individuals' incomes. This paper explores the possibility and implications of basing inequality comparisons, embodied in partial or complete orderings, explicitly upon these absolute and proportional gaps. An illustrative empirical application to UK data is reported.

PD June 1990. **TI** Asymptotically Valid Inference for a Common Class of Poverty Measures with an Application to U.K. Regional Poverty. **AA** Nuffield College and Institute for Fiscal Studies. **SR** Institute for Fiscal Studies (IFS) Working Paper: W90/8; Institute for Fiscal Studies, 180.182 Tottenham Court Road, London W1P 9LE, ENGLAND. **PG** 16. **PR** 3 pounds. **JE** I32. **KW** Poverty Index.
AB Attempts to quantify the extent of poverty cannot avoid taking account of sampling variation. This paper seeks to describe how this can be done and to illustrate its practical importance in a particular empirical application using 1983 Family Expenditure Survey data. It appears that greater theoretical sophistication in indices used may have material implications for the precision with which it is possible to estimate them even in quite large samples.

Prowse, Stephen D.

PD October 1991. **TI** The Structure of Corporate Ownership in Japan. **AA** Board of Governors of the Federal Reserve System. **SR** Board of Governors of the Federal Reserve System Finance and Economics Discussion Series: 174; C/O Jeffrey C. Fuhrer, Mail Stop 61, Federal Reserve Board, Washington, DC 20551. **PG** 26. **PR** no charge. **JE** G32, O56. **KW** Ownership Structure. Japan. Corporate Finance.
AB I examine the structure of corporate ownership in a sample of large Japanese firms in the mid-1980's. Ownership of firms is highly concentrated in Japan with financial institutions by far the most important large shareholders of the typical firm. Ownership concentration in independent Japanese firms is positively related to the returns from exerting greater control over management. This is not the case in firms that are

members of corporate groups (kereitsu). Ownership concentration and the accounting profit rate in both independent and kereitsu firms are unrelated. The results are consistent with the notion that there exist two distinct corporate governance systems in Japan -- one among independent firms and the other among firms that are members of kereitsu.

Quah, Danny

PD June 1991. **TI** The Relative Importance of Permanent and Transitory Components: Identification and Some Theoretical Bounds. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Technical Working Paper: 106; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** \$3.00. **JE** E23, E27. **KW** GNP. Production. Macroeconomics.

AB Much macroeconometric discussion has recently emphasized the economic significance of the size of the permanent component in GNP. Consequently, a large literature has developed that tries to estimate this magnitude measured, essentially, as the spectral density of increments in GNP at frequency zero. This paper shows that unless the permanent component is a random walk this attention has been misplaced: in general, that quantity does not identify the magnitude of the permanent component. Further, by developing bounds on reasonable measures of this magnitude, the paper shows that a random walk specification is biased towards establishing the permanent component as important.

Racine, Andrew D.

TI The Consequences and Costs of Maternal Substance Abuse in New York City: A Pooled Time-Series, Cross-Section Analysis. **AU** Joyce, Theodore; Racine, Andrew D.; Mocan, Naci.

Ramey, Valerie

TI Liquidity Constraints and Intertemporal Consumer Optimization: Theory and Evidence from Durable Goods. **AU** Chah, Eun Young; Ramey, Valerie; Starr, Ross M.

Ranis, Gustav

PD September 1990. **TI** The Dynamics of Rural Development: Theory and Application. **AU** Ranis, Gustav; Stewart, Frances. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 608; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven CT 06520. **PG** 46. **PR** \$2.00 + postage. **JE** O18, O11, O56. **KW** Philippines. Taiwan. Economic Development. Rural Economics.

AB This paper tries to demonstrate the potentially important role of rural non-agricultural activity in the development process. Using the Hymer/Resnick Z-goods model as a point of departure, we first show that its pessimistic conclusions are based on rather restrictive assumptions as applied to the colonial period. We relax these assumptions, indicating the theoretical possibility of substantially more positive scenario for the pre-independence era. Subsequently, we conceptualize the role of the Z-goods, traditional and non-traditional, in the post-independence era, again distinguishing between archetypal pessimistic and optimistic cases. Finally, empirical work on the comparative experience of the Philippines and Taiwan is brought to bear to demonstrate the case.

Rasmussen, Bo Sandemann

PD August 1991. **TI** Union Wages and Income Taxation. **AA** University of Aarhus. **SR** Aarhus Institute of Economics Memo: 1991-29; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 10. **PR** no charge. **JE** J31, J51, H24. **KW** Unions. Taxes. Wages. Income Tax. Labor Demand.

AB The wage response to changes in the income tax rate is considered in a unionized labor market. The sign of the wage response is shown to depend on the degree of relative risk aversion, the real wage elasticity of labor demand, and the replacement ratio. Using empirical estimates for the real wage elasticity of labor demand and the replacement ratio, the sign of the union wage response to an income tax increase is shown to be positive (negative) for the degree of relative risk aversion exceeding (being less than) unity.

Rauch, James E.

PD November 1991. **TI** Productivity Gains from Geographic Concentration of Human Capital: Evidence from the Cities. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3905; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 21. **PR** \$3.00. **JE** D24, O15, O18. **KW** Human Capital. Productivity. Education. Economic Development.

AB Based on recent theoretical development I argue that the average level of human capital is a local public good. Cities with higher average levels of human capital should therefore have higher wages and higher land rents. After conditioning on the characteristics of individual workers and dwellings, this prediction is supported by data for Standard Metropolitan Statistical Areas (SMSAs) in the United States, where the SMSA average levels of formal education and work experience are used as proxies for the average level of human capital. I evaluate the alternative explanations of omitted SMSA variables and self-selection. I conclude by computing an estimate of the effect of an additional year of average education on total factor productivity.

Ravn, Morten O.

PD May 1990. **TI** The Cross Country Correlation of Consumption in a Two Sector Real Business Cycle Model. **AA** University of Aarhus and University of Southampton. **SR** Aarhus Institute of Economics Memo: 1991-28; Institute of Economics, University of Aarhus, Building 350, Universitetsparken, DK-8000 Aarhus C, DENMARK. **PG** 20. **PR** no charge. **JE** E32, F41, E21. **KW** Business Cycle. Consumption. International Linkages. Non-Traded Goods.

AB This paper is concerned with the international transmission of real business cycles. It will focus on the correlation of consumption levels across two artificial economies producing both tradable and non-tradable commodities. These economies are constructed so as to obtain a closed form solution. It is shown that in general the cross country correlation of consumption is less than perfect and depends on the correlation of the Solow residuals.

TI Univariate Detrending of Macroeconomic Time Series. **AU** Blackburn, Keith; Ravn, Morten O.

TI Growth through Cooperation. AU Blackburn, Keith; Ravn, Morten O.

Razin, Assaf

PD August 1991. TI Vanishing Tax on Capital Income in the Open Economy. AU Razin, Assaf; Sadka, Efraim. AA Tel Aviv University. SR National Bureau of Economic Research Working Paper: 3796; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 15. PR $3.00. JE H21, E62, F41, F21. KW Tax Policy. Taxation. Returns to Capital. Capital Market.
AB The increased integration of the world capital market implies that the supply of capital becomes more elastic, and therefore potentially a less efficient base for taxation. In general, the optimal taxation of capital income is subject to two conflicting forces. On the one hand the return on existing capital is a pure rent which is efficient to fully tax. On the other hand taxing the returns on investment in new capital would retard growth thus generating inefficiencies. Capturing these considerations, the paper carries out a simple optimal tax analysis for an open economy, which is fully integrated in the world capital markets. The analysis identifies well-defined circumstances in which the capital income tax vanishes.

Rebitzer, James B.

PD October 1991. TI The Consequences of Minimum Wage Laws: Some New Theoretical Ideas. AU Rebitzer, James B.; Taylor, Lowell J. AA Rebitzer: Massachusetts Institute of Technology and National Bureau of Economic Research. Taylor: Carnegie Mellon University. SR National Bureau of Economic Research Working Paper: 3877; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. PG 14. PR $3.00. JE E24, J31, J23, J41. KW Wages. Employment. Labor Demand. Minimum Wage.
AB Economists generally agree that the immediate and direct effect of a binding minimum wage law is to move firms backward along the demand curve for low skill workers. However, this prediction of worker displacement depends critically on a model of firm behavior that abstracts from problems of work incentives. In this paper we re-examine the theoretical basis for the consensus view of minimum wage laws. The central finding is that when firms use the threat of dismissal to elicit high level of work effort, an increase in the minimum wage may have the immediate and direct effect of increasing the level of employment in low wage jobs. The formal logic of our model is similar to that found in the model of labor demand under monopsony. However, unlike the monopsony model, the positive employment effect of the minimum wage emerges in a labor market comprised of a large number of firms competing for the labor services of identical workers.

Reinhart, Carmen M.

TI Private Saving and Terms of Trade Shocks: Evidence from Developing Countries. AU Ostry, Jonathan D.; Reinhart, Carmen M.

Reiter, Stanley

PD November 1991. TI A Decentralized Linear Process for Finding Equilibria. AA Northwestern University. SR Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 967; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. PG 21. PR $3.00 U.S. and Canada; $5.00 via international mail. JE C61, C62. KW Linear Programming. Learning.
AB This paper presents a decentralized dynamic process designed to apply to the case of linear equilibrium equations. The computations required by the process are a few simple arithmetic calculations per step. Memory and time requirements increase roughly as the third power of the number of agents (equations). The process presented in this paper can also be viewed as a distributed algorithm for solving a distributed system of linear equations.

Repullo, Rafael

PD October 1991. TI Financing Budget Deficits by Seigniorage and Implicit Taxation: The Cases of Spain and Portugal. AA Bank of Spain. SR Centre for Economic Policy Research Discussion Paper: 583; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. PG 21. PR 3 pounds ($5.00). JE E42, E58, E52, H61. KW Central Banks. Seigniorage. Taxation. Monetary Policy. Government Spending.
AB This paper evaluates the contribution of seigniorage and implicit taxation of financial intermediation to the financing of the budget deficits in Spain and Portugal during the 1980's. The paper starts with a simple partial equilibrium model of the banking sector, which is used to derive two sets of comparative static results related to the main policy instruments used by the Spanish and the Portuguese central banks, namely reserve requirements and credit ceilings. Both control mechanisms amount to an implicit tax on financial intermediation, whose revenue can be added to formalization of the government intertemporal budget constraint, which justifies the measures of seigniorage and implicit taxation that are computed for the period 1980-1990. The results show that this source of revenue is very significant: its average value for the 1980's is 1.71% of GDP for Spain and 3.98% of GDP for Portugal.

Revesz, Richard L.

TI Multi-Defendant Settlements: The Case of Superfund. AU Kornhauser, Lewis A.; Revesz, Richard L.; Takeda, Keith T.

Rietz, Thomas

TI An Experiment on Coordination in Multi-Candidate Elections: The Importance of Polls and Election Histories. AU Forsythe, Robert; Myerson, Roger B.; Rietz, Thomas; Weber, Robert.

Rizzo, Mario J.

PD October 1991. TI Equilibrium Visions. AA New York University. SR New York University Economic Research Reports: 91-58; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. PG 19. PR no charge. JE B21, B41. KW Equilibrium Theory. Austrian School. Expectations. Economic Thought.
AB The central question addressed by this essay is: What is the role of the equilibrium construct in understanding economic change? Or, restated somewhat paradoxically: How can we understand movement by positing the absence of movement? This question is answered by surveying, contrasting and critically evaluating the views of Ludwig von Mises, Friedrich

Hayek, and Ludwig Lachmann on the uses of equilibrium theory in a system of economic processes. The importance of this goes beyond understanding the Austrian School. These ideas have applicability in many other traditions of economic thought, including Evolutionary Economics, Institutionalism, Post Keynesianism, and Schumpeterianism, to mention only some.

Robbins, Edward Henry

TI Going Public. **AU** Jacklin, Charles J.; Robbins, Edward Henry.

Rockoff, Hugh

TI Gresham's Law Regained. **AU** Greenfield, Robert L.; Rockoff, Hugh.

Rodriguez, Carlos A.

TI Dollarization in Latin America: Gresham's Law in Reverse? **AU** Guidotti, Pablo E.; Rodriguez, Carlos A.

Rodrik, Dani

PD January 1992. **TI** The Rush to Free Trade in the Developing World: Why so Late? Why Now? Will It Last?. **AA** Stanford University. **SR** National Bureau of Economic Research Working Paper: 3947; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F13, E63, F41, D78. **KW** Developing Countries. Trade Policy.

AB This paper asks why developing country policy-makers have been so reluctant to undertake trade reform until the 1980's, and why many of them have embraced open trade policies so wholeheartedly since then. To answer these questions, the paper develops a heuristic index of the "political cost-benefit ratio" (PCBR) of policy reform. The PCBR is a measure of the amount of redistribution of income generated for every dollar of income being reshuffled within the economy for every dollar of net efficiency gain. However, when the liberalization is undertaken at a point of deep macroeconomic crisis and in conjunction with stabilization policies, the value of the PCBR index falls dramatically. This explains why trade reform is politically so difficult in normal times, and why times of crisis provide an opportune moment for undertaking structural reforms. The paper concludes by evaluating the sustainability of the reforms of the 1980's.

TI External Shocks, Politics, and Private Investment: Some Theory and Empirical Evidence. **AU** Ozler, Sule; Rodrik, Dani.

PD January 1992. **TI** The Rush to Free Trade in the Developing World: Why so Late? Why Now? Will it Last? **AA** Stanford University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3947; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 39. **PR** $3.00. **JE** F13, E61, F14, F41. **KW** Trade Reform. Trade Policy. Stabilization Policy. Developing Countries.

AB This paper asks why developing country policy-makers have been so reluctant to undertake trade reform until the 1980's and why many of them have embraced open trade policies so wholeheartedly since then. To answer these questions, the paper develops a heuristic index of the "political cost-benefit ratio" (PCBR) of policy reform. The PCBR is a measure of the amount of redistribution of income generated for every dollar of efficiency gain achieved by reform. Judged by this index, trade reform performs very poorly: liberalization typically leads to five dollars of income being reshuffled within the economy for every dollar of net efficiency gain. However, when the liberalization is undertaken at a point of deep macroeconomic crisis and in conjunction with stabilization policies, the value of the PCBR index falls dramatically. This explains why trade reform is politically so difficult in normal times, and why times of crisis provide an opportune moment for undertaking structural reforms. The paper concludes by evaluating the sustainability of the reforms of the 1980's.

Rogerson, Richard

TI Human Capital Accumulation and Income Distribution. **AU** Fernandez, Raquel; Rogerson, Richard.

Roland, Gerard

PD January 1992. **TI** The Political Economy of Transition in the Soviet Union. **AA** Universite Libre de Bruxelles. **SR** Centre for Economic Policy Research Discussion Paper: 628; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 40. **PR** 3.00 pounds or $5.00. **JE** P26, D72, P52. **KW** Soviet Union. Political Economy. Economic Reform.

AB This paper analyzes the political economy of transition in the Soviet Union since Perestroika. It is argued that no major sequencing errors were made and that important steps were taken in the direction of democratization and the introduction of a private sector. Gorbachev's major error can be attributed to the macro mismanagement from 1985 onwards, leading to a loss of a central control and to the disintegration of the Soviet Union, unleashing nationalist forces and necessitating an increase in the speed of economic transition, in a situation where the political conditions for further reform had not yet been met. After the disintegration of the Union, stalemate between republics over the sharing of the costs of transition and stabilization delays the adoption of necessary economic measures.

PD February 1992. **TI** Privatization in Eastern Europe: Irreversibility and Critical Mass Effects. **AU** Roland, Gerard; Verdier, Thierry. **AA** Roland: Universite Libre de Bruxelles. Verdier: DELTA, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 612; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 41. **PR** 3.00 pounds or $5.00. **JE** D62, E61, L33, O52. **KW** Privatization. Eastern Europe. Scale Economies. Credibility.

AB This paper proposes a model to shed light on two important policy features of privatization in Central and Eastern Europe: the idea of a necessary critical mass of privatization on the one hand, and the difficulties encountered in the actual privatization process on the other, related to the government's inability to precommit to announced policies. The main ingredient of the model is the existence of a positive externality related to the size of the private sector, providing at the same time a rationale for the idea of a critical mass, but also creating a coordination problem generating multiple equilibria. This paper also shows how the distribution of free shares to the population currently advocated in Eastern Europe, may credibly make the privatizations irreversible, without completely solving the coordination problem, and even worsening in some cases, the welfare outcome.

Romer, David

PD December 1991. **TI** Openness and Inflation: Theory and Evidence. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3936; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $3.00. **JE** F41, E52, E51. **KW** Monetary Policy. Exchange Rate. Open Economy. Money Supply.

AB This paper points out and tests a straight forward but previously unnoticed prediction of models in which the absence of precommitment in monetary policy leads to real exchange rate depreciation, and because the harms of real depreciation are greater in more open economies, the benefits of surprise expansion are decreasing in the degree of openness. Thus, under discretionary policy-making, money growth and inflation will be lower in more open economies. After presenting a simple theoretical model demonstrating this prediction of the theory, the paper examines the link between openness and inflation using cross-country data. The data reveal a strong negative link between openness and inflation.

Rose, Andrew K.

TI How Pervasive is the Product Cycle? The Empirical Dynamics of American and Japanese Trade Flows. **AU** Gagnon, Joseph E.; Rose, Andrew K.

TI How Pervasive is the Product Cycle? The Empirical Dynamics of American and Japanese Trade Flows. **AU** Gagnon, Joseph E.; Rose, Andrew K.

Rose, Nancy L.

PD July 1991. **TI** Fear of Flying? Economic Analyses of Airline Safety. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3784; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** L93, L51, L52. **KW** Airlines. Transportation. Regulation.

AB The safety of the commercial airline industry has attracted considerable public attention and debate since economic deregulation of the industry in 1978. These concerns have energized economic research on three aspects of airline safety. First, has the level of airline safety declined since deregulation? Research on this topic investigates whether heightened public concerns about air safety derive from objective increases in accident risks. Second, what accounts for differences in safety performance across carriers? This literature analyzes heterogeneity in carriers' safety records as a means of learning about factors that influence safety performance. Third, how do markets respond to airline accidents? This work explores the effectiveness of market incentives in constraining the safety provision of firms. This paper describes our progress in answering each of these queries.

TI Competition and Price Dispersion in the U.S. Airline Industry. **AU** Borenstein, Severin; Rose, Nancy L.

Rosen, Sherwin

PD November 1991. **TI** The Market for Lawyers. **AA** University of Chicago. **SR** Economics Research Center/NORC Discussion Paper: 91-10; Economics Research Center/NORC, 6030 S. Ellis, Chicago, Illinois 60637. **PG** 38. **PR** $2.00; send requests to Librarian, NORC. **JE** J44, J24, I21. **KW** Education. Labor Demand. Labor Supply. Professional Labor Markets.

AB Earnings, entry, and demographic composition of lawyers are analyzed empirically from CPS data for 1967-86. Entry of women and large college class sizes eligible for law school accounts for the enormous growth of the legal profession over the period. The size of law schools increased at a slower pace. Real earnings of both lawyers and college graduates unadjusted for changing demographic composition followed a wave-like pattern, rising over 1967-1971, falling during 1972-81, and rising sharply thereafter. Correcting earnings data for demographic shifts implies that the rate of return to legal education increased by a point or two in the 1980's, but on whole was fairly flat over the entire period, supporting the idea that supplies of new entrants are elastic and responded rapidly to sharply increasing demand for legal services. However, the standard dynamic model does less well in explaining year-to-year changes in the timing of entry.

Ross, Thomas W.

TI Bank Runs: Liquidity and Incentives. **AU** Cooper, Russell; Ross, Thomas W.

Roubini, Nouriel

PD October 1991. **TI** Financial Development, the Trade Regime and Economic Growth. **AU** Roubini, Nouriel; Sala-i-Martin, Xavier. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 646; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 57. **PR** $2.00 + postage. **JE** E44, F13, F14, O54. **KW** Trade Policy. Financial Markets. Economic Growth. Latin America.

AB We survey the literatures that study the relation between the trade regime and growth and financial development, financial repression, and growth. We analyze the relation between the trade regime, the degree of financial development and the growth performance of a large cross-section of countries. The systematic finding is that there is a negative relation between trade distortions and growth. We also present some variables that capture the degree to which the financial sector is distorted. We find that financial repression has negative consequences for growth. We also find that inflation is negatively related to growth. We interpret this relation, however, as symptomatic rather than causal. We show that once we hold constant measures of the trade regime and financial repression, the regional dummies for Latin America are no longer significant. Thus, the poor performance of the Latin American countries over the last few decades is related to the trade and financial policies pursued by their governments.

TI Macroeconomic Policy and Elections in OECD Democracies. **AU** Alesina, Alberto; Cohen, Gerald D.; Roubini, Nouriel.

Rubinfeld, Daniel L.

TI Fiscal Federalism in Europe: Lessons From the United States Experience. **AU** Inman, Robert P.; Rubinfeld, Daniel L.

Rubinstein, Ariel

PD August 1991. **TI** On Price Recognition and

https://doi.org/10.1017/S0951007900002576 Published online by Cambridge University Press

Computational Complexity in a Monopolistic Model. **AA** Tel Aviv University. **SR** Tel Aviv Foerder Institute for Economic Research Working Paper: 35-91; Department of Economics, Tel Aviv University, Ramat Aviv 69978, Tel Aviv, ISRAEL. **PG** 21. **PR** no charge. **JE** D42, D11, D82. **KW** Monopoly. Pricing. Bounded Rationality. Price Discrimination.

AB This paper introduces a simple economic model in which the decision-makers differ in their ability to recognize price offers. The cornerstone of the model is a market for an indivisible good produced by a monopolist who receives exclusive information on the state of nature affecting the production costs and the consumers' evaluation of the good. The market operates so that the monopolist has to commit himself to a price and each consumer has to decide whether he accepts or rejects the offer. The monopolist has an interest in only a fraction of the consumers accepting the offer. The heterogeneity of the consumers is modeled first, in terms of the limits on the fineness of the price recognition and second, in terms of the limits on the complexity of the computations they can make. In the second submodel, tools are borrowed from the parallel computation literature. In equilibrium, the monopolist announces a price scheme which is sufficiently complicated that only some of the consumers (the more "sophisticated" ones) can decode all the information contained in the prices. Such pricing strategies enable the monopolist to increase his profits relative to those he could derive from a set of homogeneous consumers.

Rustichini, Aldo

TI Indeterminacy of Equilibria in Models with Infinitely Lived Agents and External Effects. **AU** Boldrin, Michele; Rustichini, Aldo.

Saari, Donald G.

PD November 1991. **TI** Millions of Election Outcomes from a Single Profile. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 963; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 29. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** D72, D71. **KW** Elections. Voting. Social Choice. Voting Behavior.

AB By changing the choice of a positional voting method, different election rankings can result from a fixed profile. A geometric theory is developed to explain why this occurs, to completely characterize all possible sets of rankings that can arise in this manner, to determine the number of rankings and other properties of these sets of rankings, to design profiles that cause the different conclusions, to develop elementary tools to analyze actual data, and to compare new types of social choice solutions that are based on the set of rankings admitted by a profile. A secondary theme is to indicate how results for voting theory can be obtained with (relative) ease when they are analyzed with a geometric approach.

PD November 1991. **TI** Symmetry Extensions of "Neutrality" I: Advantage to the Condorcet Loser. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 969; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 28. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** D72, D71. **KW** Elections. Social Choice. Elections. Voting Behavior.

AB This is the first of three papers introducing a theory for positional voting methods that determines all possible election rankings and relationships that ever could occur with a profile over all possible subsets of candidates for any specified choices of positional voting methods. As such, these results extend to all positional voting systems what was previously possible only for the Borda count and the plurality voting systems. In this first part certain mathematical symmetries based on neutrality are used 1) to generalize the basic properties that cause the desired features of the Borda Count and 2) to describe classes of positional voting methods with new types of election relationships among the election outcomes. Some of these relationships generalize the well- known results about the positioning of a Condorcet winner/loser within a Borda ranking, but now it is possible for the Condorcet loser, rather than the winner, to have the advantage to win certain positional elections. Included among the results are axiomatic characterizations of many positional voting methods.

Sacerdoti, Emilio

TI Mozambique: Economic Rehabilitation and the Poor.
AU Lopes, Paulo S.; Sacerdoti, Emilio.

Sadka, Efraim

TI Vanishing Tax on Capital Income in the Open Economy.
AU Razin, Assaf; Sadka, Efraim.

Sah, Raaj K.

PD October 1989. **TI** A Useful and Easily-Tested Statement of Some Schur-Cohn Stability Criteria for Higher-Order Discrete Dynamic Systems. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 614; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 6. **PR** $2.00 + postage. **JE** C62, C60. **KW** Dynamic Model. Equilibrium Conditions.

AB The classical Schur-Cohn criteria are an important source of stability conditions for discrete dynamic systems. However, the conventional statement of these criteria is opaque and not of much direct use for an applied analysis of higher-order dynamic systems. The contribution of this note is to show how some of these criteria can be stated as useful and easily-tested restrictions on the gradient of the original higher-order system.

PD December 1989. **TI** The Effects of Mortality Changes on Fertility Choice and Individual Welfare: Some Theoretical Predictions. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 599; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 26. **PR** $2.00 + postage. **JE** J13, I12. **KW** Mortality. Fertility. Children.

AB The study of the effects of changes in child mortality on individual fertility decisions has been a cornerstone of the economic analysis of population. Empirical studies have overwhelmingly shown that a lower mortality rate leads to lower fertility. Yet, in even the simplest theoretical models of fertility choice, it has not been possible to satisfactorily analyze this relationship. This paper attempts to reduce this long-standing gap between theory and the empirical literature. The paper shows that a set of simple and plausible conditions is sufficient to yield the typically observed effect of mortality changes on fertility choice. Another concern of this paper is to examine the effects of changes on individual welfare. Though such welfare assessments are important for certain types of policy evaluations, they did not appear to have received attention in the literature. This paper presents some new and robust results on this issue.

PD March 1990. **TI** Some Envelope Theorems for Integer and Discrete Choice Variables. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 598; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 11. **PR** $2.00 + postage. **JE** C25, C61. **KW** Optimization Problem. Discrete Choice. Mathematical Economics.
AB Though the envelope theorem is a widely used tool of applied economic analysis, the standard version of the theorem can only be used if all of the choice variables are assumed to be continuous. This limitation is significant because the natural description of many economic choice variables is as integers (e.g., the number of projects or children, as well as variables that represent various yes-no choices and choices that entail fixed costs). A continuous representation of such variables is not only unsatisfactory and a source of potential error, but it can also make certain kinds of economic analyses intractable or unproductive. The paper shows that modified but intuitive versions of the envelope theorem can be used with integer or discrete choice variables, provided the optimization problem satisfies the usual conditions. Thus, the results presented here make it possible to use the envelope theorem in a variety of economic problems.

PD March 1990. **TI** Social Osmosis and Patterns of Crime: A Dynamic Economic Analysis. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 609; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 32. **PR** $2.00 + postage. **JE** K42, K14. **KW** Law Enforcement. Punishment. Crime.
AB Though crime and the fear of crime have a deep negative impact on the well being of individuals and societies, there are several aspects of this phenomenon that are not adequately understood at present within economic models. For instance, individuals' perceptions of the probability of punishment (for a given crime) differ widely within and across societal groups, and these perceptions in turn differ from the actual probability of punishment. Also, even after controlling for various economic and deterrence variables, crime rates in different societal groups have often been observed to be strongly correlated with background variables like location, age structure and ethnicity. One of the points of departure of this paper concerns the treatment of individuals' perceptions. In the literature based on Becker's seminal study, an individual's perceived probability of punishment is typically treated as an exogenous parameter that is the same for all individuals and equal to the actual probability of punishment. The present paper begins by developing a model in which an individual's perceptions and the resulting choice are endogenously determined.

Saint-Paul, Gilles

TI On the Virtue of Bad Times: An Analysis of the Interaction between Economic Fluctuations and Productivity Growth. **AU** Aghion, Philippe; Saint-Paul, Gilles.

TI The Macroeconomic Impact of Flexible Labour Contracts: An Application to Spain. **AU** Bentolila, Samuel; Saint-Paul, Gilles.

PD January 1992. **TI** Education, Democracy and Growth. **AU** Saint-Paul, Gilles; Verdier, Thierry. **AA** DELTA, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 613; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 31. **PR** 3.00 pounds or $5.00. **JE** D31, J24, I21, I28. **KW** Education. Income Distribution. Democracy. Political Economy. Human Capital.
AB This paper constructs a model where redistribution, determined by a political equilibrium, is in the form of public education. Public education is favorable for growth because it increases the level of human capital and at the same time it tends to produce a more even income distribution. The model is solved in the presence or absence of distortionary taxation. The main results are that for a given structure of political rights, more inequality may be good for growth if it implies more political support for education; increased political rights are good for growth and also imply a more equal income distribution; growth and inequality tend to decrease along the convergence path in the absence of political or distributional shocks. If distortions are important, these results may be qualified and one may obtain a hump-shaped relation between inequality and growth.

Sala-i-Martin, Xavier

TI Public Finance in Models of Economic Growth. **AU** Barro, Robert J.; Sala-i-Martin, Xavier.

TI Convergence. **AU** Barro, Robert J.; Sala-i-Martin, Xavier.

PD August 1991. **TI** The Timing of Government Spending in a Dynamic Model of Imperfect Competition. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 641; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 34. **PR** $2.00 + postage. **JE** E62, H31, H32, H21. **KW** Fiscal Policy. Taxes. Public Spending. Government Spending.
AB The debate on macroeconomic implications of fiscal policy has focused on the question of whether the timing of taxes matters but has neglected the study of the relevance of the timing of public spending. This paper tries to fill that hole by presenting a model of dynamic fiscal policy where firms behave non competitively and households have finite horizons. I show that the existence of monopoly rents makes the timing of future government spending relevant. In particular I show that, contrary to the prediction of most other models of fiscal policy, an anticipated increase in public spending financed by subsequent tax increases may have expansionary effects as the positive wealth effect associated with monopoly rents outweights the negative wealth effect of anticipated higher taxes. I also show that if the public spending expansion is financed by subsequent public spending contraction, the experiment has unambiguous expansionary effects. The model presented can be thought as a microfounded story of Blanchard's Good-News-Bad-News model of public policy.

TI Financial Development, the Trade Regime and Economic Growth. **AU** Roubini, Nouriel; Sala-i-Martin, Xavier.

TI A Note on the Time-Elimination Method for Solving Recursive Dynamic Economic Models. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier.

TI Transitional Dynamics in Two-Sector Models of

Endogenous Growth. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier.

TI Public Finance in Models of Economic Growth. **AU** Barro, Robert J.; Sala-i-Martin, Xavier.

Samuelson, Larry

TI An Extension of the "Folk Theorem" with Continuous Reaction Functions. **AU** Friedman, James W.; Samuelson, Larry.

TI Continuous Reaction Functions in Duopolies. **AU** Friedman, James W.; Samuelson, Larry.

Samuelson, William F.

TI Labor Supply Flexibility and Portfolio Choice in a Life-Cycle Model. **AU** Bodie, Zvi; Merton, Robert C.; Samuelson, William F.

Samwick, Andrew

TI Social Security Rules and Marginal Tax Rates. **AU** Feldstein, Martin; Samwick, Andrew.

Savouri, Savvas

TI Regional Wage Determination in Great Britain. **AU** Jackman, Richard; Savouri, Savvas.

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 Political Science and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3780; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O31, O34. **KW** Patents. Property Rights. Technology. France.

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.

PD December 1991. **TI** Revisions of Investment Plans and the Stock Market Rate of Return. **AA** London School of Economics and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3937; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 26. **PR** $3.00. **JE** G31, E22, G14. **KW** Investment. Rate of Return. Uncertainty. Stock Market.

AB This paper explores the sources of uncertainty that cause firms to revise their capital investment plans and the stock market to revise its valuation of those firms. A simple method is developed to decompose the uncertainty governing revisions in investment plans and the stock market rate of return in micro, sectoral and aggregate components, and to measure the degree of heterogeneity in micro responses to common disturbances. The method is applied to a panel data set of firms in the the U.S. economy for the period 1950-1973. The empirical results show that the capital investment decision is governed primarily by idiosyncratic uncertainty, but common disturbances are more important for movements in the stock market rate of return.

Scharfstein, David

TI Anatomy of Financial Distress: An Examination of Junk-Bond Issuers. **AU** Asquith, Paul; Gertner, Robert; Scharfstein, David.

Scheinkman, Jose A.

TI Growth in Cities. **AU** Glaeser, Edward L.; Kallal, Hedi D.; Scheinkman, Jose A.; Shleifer, Andrei.

Schultz, T. Paul

PD May 1990. **TI** Testing the Neoclassical Model of Family Labor Supply and Fertility. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 601; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 31. **PR** $2.00 + postage. **JE** D11, D12, J22, J13. **KW** Labor Supply. Consumer Economics. Households. Fertility.

AB The McElroy-Horney Nash-bargaining model of family demand behavior relaxes the restriction that non-earned income of husband and wife has the identical effect on family labor supply and commodity demands. This restriction of the neoclassical model of family behavior is tested for the determination of husband and wife labor supply and fertility based on the 1981 Socioeconomic Survey of Thailand. The neoclassical restriction is rejected for female labor supply and fertility. Another unexplored limitation of family demand studies, due to the sample self-selection of intact marriages, is empirically treated through alternative estimation strategies. In this case, a more sharply focused theory of marital behavior is needed to identify family demand models.

PD June 1990. **TI** Returns to Women's Education. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 603; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 68. **PR** $2.00 + postage. **JE** I21, J11, J13, O15, H52. **KW** Education. Fertility. Children. Human Capital. Developing Countries. Economic Development.

AB Evidence is presented that schooling for women is economically warranted on several grounds: private efficiency or relatively high individual private market rates of return, relatively high social returns augmented by externalities such as decreased child mortality and unwanted fertility, equity in the sense of increased productive capabilities of a group that is relatively poor, and intergenerational redistribution toward the better health and education of children and a slower growth in population. Although investments in the schooling of women have increased with economic development over time within most nations, and with increasing per capita income across nations, there remain major regions of Asia and Africa where the ratio of public investment in the schooling of women relative to that of men is one-half to two-thirds. These large gender differentials in investments in human capital that divide low income countries warrant careful quantitative study to focus informed debate on the economic and demographic costs and benefits of increasing investments in the schooling of women.

Schwab, Robert M.

TI Consumption Taxes in a Life-Cycle Framework: Are Sin Taxes Regressive? **AU** Lyon, Andrew B.; Schwab, Robert M.

Schwartz, Amy Ellen

TI State Infrastructure and Productive Performance. **AU** Morrison, Catherine J.; Schwartz, Amy Ellen.

Shaffer, Sherrill

PD October 1991. **TI** Potential Merger Synergies among Large Commercial Banks. **AA** Federal Reserve Bank of Philadelphia. **SR** Federal Reserve Bank of Philadelphia Research Working Paper: 91-17; 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 payable to Federal Reserve Bank of Philadelphia. **JE** G21, G34, L41. **KW** Banking. Mergers. Scale Economies. Cost Functions.

AB This paper uses a fitted multiproduct translog cost function to simulate mergers between pairs of U.S. commercial banks with assets exceeding $1 billion, and studies the predicted impact of such mergers on total costs. The estimated cost function itself, which incorporates a few minor improvements to the standard specification, implies economies of scale across the entire sample. The simulated mergers are found to imply that costs can be reduced in nearly half of the possible mergers, even without altering the merged bank's output mix. The vast majority of the most cost-efficient mergers are across state lines. Few cases of potential cost synergies were found between pairs of banks each larger than $10 billion.

Shaw, Kathryn

TI Pensions and Wage Premia. **AU** Montgomery, Edward; Shaw, Kathryn.

Shi, Li

TI The Determinants of Educational Attainment in China. **AU** Knight, John B.; Shi, Li.

Shleifer, Andrei

TI Growth in Cities. **AU** Glaeser, Edward L.; Kallal, Hedi D.; Scheinkman, Jose A.; Shleifer, Andrei.

PD July 1991. **TI** Pervasive Shortages under Socialism. **AU** Shleifer, Andrei; Vishny, Robert. **AA** Shleifer: Harvard University and National Bureau of Economic Research. Vishny: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3791; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** P21, P22, P27, P26. **KW** Socialism. Shortages.

AB We present a new theory of pervasive shortages under socialism, based on the assumption that the planners are self-interested. Because the planners - meaning bureaucrats in the ministries and managers of firms cannot keep the official profits that firms earn, it is in their interest to create shortages of output and to collect bribes from the rationed consumers. Unlike official profits, bribes are not turned over to the state, and so shortages enable the key decision-makers who collect them to profit personally. The theory suggests that an increase in the official price of a good might reduce output. The theory also suggests that market socialism is bound to fail even without computational complexities facing the planners.

Sickles, Robin C.

TI The Structure of Production, Technical Change and Efficiency in a Multiproduct Industry: An Application to U.S. Airlines. **AU** Good, David H.; Nadiri, M. Ishaq; Sickles, Robin C.

Siegel, Donald

PD December 1991. **TI** Errors in Output Deflators Revisited: Unit Values and the PPI. **AA** Bureau of Labor Statistics, State University of New York, Stony Brook, and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3935; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 27. **PR** $3.00. **JE** E31, C43, C81. **KW** Price Indices. Measurement Error. Prices.

AB Extending a methodology developed by Lichtenberg and Griliches (1989), we examine the extent of measurement error in two independent indicators of price change: the producer price index (PPI) and the U.S. Census Bureau's unit value relative (UVR). Estimation of factor analytic models is improved by the availability of more accurate and comprehensive proxies for price and quality change within industries and a more complete specification of the econometric model. We find that the UVR is a "noisier" measure of price change than the PPI and that the PPI adjusts for approximately 57% of product quality change.

Sindelar, Jody L.

TI Alcoholism, Work, and Income over the Life Cycle. **AU** Mullahy, John; Sindelar, Jody L.

Sinn, Hans Werner

PD February, 1992. **TI** Privatization in East Germany. **AA** University of Munich and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3998; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** O11, O52, O21, L33. **KW** Investment. Privatization. Industrial Policy. Economic Reform.

AB This paper is a critical review of east German privatization policy. It is argued that the restitution of old property rights has been a major obstacle to investment and that the attempt to sell two thirds of an economy in the market place is bound to be a failure. Such an attempt implies serious macro and microeconomic stock-flow problems which erode the sales prices of Treuhand assets, induce the Treuhand to slow down its sales, and reduce private investment. By combining a participation model with a wage freeze the paper designs a social contract that may help increase the chances of economic recovery in east Germany.

Skinner, Jonathan

PD October 1991. **TI** Housing and Saving in the United States. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3874; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 33.

PR $3.00. **JE** E21, R21, D12. **KW** Capital Accumulation. Urban Economics. Housing. Savings. Housing Markets.

AB During the 1970's, the share of housing wealth in total household wealth grows from roughly 20 percent to 30 percent, delivering a windfall of $700 billion to homeowners. How might this fundamental shift affect aggregate capital accumulation? I first survey the growing literature on life cycle housing choices to shed light on this question. The literature suggests that the housing wealth shift will have minimal impact on capital accumulation. Second, how might an unexpected increase in housing prices affect short-term saving by homeowners? There is mixed evidence; some studies suggest that homeowners are saving their windfalls, other suggest a moderate degree of depletion. Third, how have renters responded to the now higher cost of homeownership? Renters appear to save more in response to higher housing prices, although the effects are not quantitatively large relative to aggregate saving. Finally, are post-1970's homeowners at greater financial risk because of volatile housing prices and overlagged housing purchases? New evidence suggests that they do not face greater risk; median households are less highly mortgaged in 1986 than in 1969, and the volatility of housing prices has not changed significantly during the same period.

PD December, 1991. **TI** Individual Retirement Accounts: A Review of the Evidence. **AA** University of Virginia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3938; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 30. **PR** $3.00. **JE** G23, E22, H21, E21, D12. **KW** Taxes. Pensions. Retirement. Savings.

AB Recent legislative proposals have included restoring Individual Retirement Accounts (IRAs) to their pre-1987 eligibility rules. Whether IRAs are simply tax windfalls with no effect on saving, or whether IRAs stimulate saving, is a crucial issue in evaluating the effectiveness of such proposals. In this paper, I review the previous literature on IRAs as well as presenting new evidence on the saving behavior of IRA contributors. In brief, IRA contributors are wealthier and older than the general population. There is no clear consensus from structural economic models on whether IRA contributions are new saving or old, shuffled, saving. Nevertheless, IRA contributors during the 1980's were remarkably active savers. For example, the typical IRA contributor was estimated to have increased total financial wealth in real terms by 71 percent between 1982- 86. Individual Retirement Accounts may have induced saving through psychological factors not normally present in orthodox economic models, but evidence on such factors is speculative rather than conclusive.

Slemrod, Joel

TI Income Shifting in U.S. Multinational Corporations. **AU** Harris, David; Slemrod, Joel; Yeung, Bernard; Morck, Randall.

PD February 1992. **TI** Taxation and Inequality: A Time-Exposure Perspective. **AA** University of Michigan, Ann Arbor and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3999; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** H22, H23, H24, D31. **KW** Taxation. Income Distribution. Income Tax. Redistributive Taxation.

AB Conclusions about inequality based on cross-sectional snapshots of annual income can give a misleading picture of the inequality of a more permanent notion of income, due to the mobility of individuals across annual income classes. This paper reassesses some of the issues about taxation and inequality using two longitudinal tax return data bases. Replacing annual income with "time-exposure" income, defined as average real income over the period, does not significantly reduce the measured degree of inequality in the 1979-1985 period, although the fraction of income received by the lowest increase substantially. The procedure does, though, reduce the contribution to inequality of certain sources of income such as capital gains and increase the contribution of other sources such as interest and dividends. There is no systematic evidence that the comparison of snapshots between 1967-1973 and 1979-1985 periods overstate the growth in inequality of a more permanent notion of income. The inequality of pre-tax income has been increasing steadily in the past two decades. Changes in income taxation have neither stemmed nor contributed significantly to this trend; since 1980 the contribution of the income tax to decreasing inequality has declined slightly.

Smith, Bruce D.

TI Currency Elasticity and Banking Panics: Theory and Evidence. **AU** Champ, Bruce; Smith, Bruce D.; Williamson, Stephen D.

Smith, Robert S.

TI Pension Funding in the Public Sector. **AU** Mitchell, Olivia S.; Smith, Robert S.

Soderlind, Paul

TI Devaluation Expectations: The Swedish Krona 1982-1991. **AU** Lindberg, Hans; Svensson, Lars E. O.; Soderlind, Paul.

Sokoloff, Kenneth L.

PD July 1991. **TI** The Market for Manufacturing Workers during Early Industrialization: The American Northeast, 1820 to 1860. **AU** Sokoloff, Kenneth L.; Villaflor, Georgia C. **AA** Sokoloff: University of California, Los Angeles and National Bureau of Economic Research. Villaflor: San Diego State University. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors and Long-Run Growth: 28; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** N31, N61. **KW** Industrialization. Labor Force. Manufacturing. Wages.

AB This paper studies how well labor markets operated, and industrial workers fared, during early American industrialization. The principal bodies of evidence examined are four cross-sections of manufacturing firm data from 1820 to 1860, and newly-constructed price indexes for classes of products in different locales. The central findings are that real wages rose substantially over time for all segments of the manufacturing labor force. Workers responded flexibly to changing circumstances, and benefited almost immediately from the rapid expansion of the 1820's. Impressive growth in compensation was maintained until the late 1840's or early 1850's, when progress was slowed by heavy immigration and the mechanization of a number of previously labor intensive industries.

Sorensen, B. E.

TI Imperfect Capital Markets, Heterogeneous Investors and the Demand for Risky Assets. **AU** Perraudin, W. R. M.; Sorensen, B. E.

Sosvilla-Rivero, Simon

TI Efficiency in the Peseta Forward Exchange Rate Market. **AU** Ayuso, Juan; Dolado, Juan J.; Sosvilla-Rivero, Simon.

Spiegel, Mark

TI Growth Accounting with Physical and Human Capital Accumulation. **AU** Benhabib, Jess; Spiegel, Mark.

PD January 1992. **TI** Sovereign Risk Exposure with Potential Liquidation: The Performance of Alternative Forms of External Finance. **AA** New York University. **SR** New York University Economic Research Reports: 92-03; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 31. **PR** no charge. **JE** H21, F23, F34. **KW** Taxes. Foreign Investment. Developing Countries. External Finance.

AB When sovereign governments choose to tax different classes of agents at different rates, the ability to liquidate assets to favored agents is valued by exposed agents. This paper introduces a model where foreign investors can profitably liquidate foreign direct investments, but not debt claims. The model predicts that the value of the liquidation option increases as the riskiness of the host country increases, implying that the optimal share of foreign direct investment in the inward investment portfolio should be positively correlated with sovereign risk for 52 developing countries, using survey data from foreign investors from 1979 through 1989 which rank the countries on the basis of credit worthiness, and measures of observed politically unstable events. The empirical results provide support for the model: Decreases in a country's survey rating and four out of five event study indicators are positively correlated with the share of foreign direct investment in private investment flows.

Spiegel, Matthew

TI Underpriced Initial Public Offers as a Multi-Product Investment House Strategy. **AU** Fulghieri, Paolo; Spiegel, Matthew.

Spitz, Janet

PD July 1989. **TI** An Empirical Test of Efficiency Wage Theory. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1053; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 38. **PR** not available. **JE** J41, J31, J24, J63. **KW** Wages. Efficiency Wages. Productivity. Turnover.

AB Efficiency wage theory thus has two parts: a labor supply condition where wages or unemployment affect workers' supply (of effort, if not hours), and an employer response in terms of minimization of labor costs. This paper tests the first component of efficiency wage theory, the condition of labor supply. Data is used from a work situation where employees influence the pace of their work, a chain of unionized supermarkets in northern California. The main result is that little support was found for the predictions of labor supply: neither unemployment nor the relative level of the wage influenced worker productivity, store performance or turnover in this sample of modern grocery stores.

Stark, Graham

TI TAXBEN2: The New IFS Tax Benefit Model. **AU** Johnson, Paul; Stark, Graham; Webb, Steven.

Starr, Ross M.

TI Liquidity Constraints and Intertemporal Consumer Optimization: Theory and Evidence from Durable Goods. **AU** Chah, Eun Young; Ramey, Valerie; Starr, Ross M.

Stefanou, Spiro

TI Polish Agriculture in Transition: Does it Hurt to be Slapped by an Invisible Hand? **AU** Karp, Larry; Stefanou, Spiro.

Steinmeier, Thomas L.

TI Pension COLAs. **AU** Gustman, Alan L.; Steinmeier, Thomas L.

Stewart, Frances

TI The Dynamics of Rural Development: Theory and Application. **AU** Ranis, Gustav; Stewart, Frances.

Stewart, Geoff

TI The Determinants of Labour-Managed Entry: Poisson Regression Models of U.K. Count Data. **AU** Podivinsky, Jan M.; Stewart, Geoff.

Stole, Lars

TI Do Short-Term Managerial Objectives Lead to Under- or Over-Investment in Long-Term Projects? **AU** Bebchuk, Lucian; Stole, Lars.

Strauss, John

TI Prices, Infrastructure, Household Characteristics and Child Height. **AU** Thomas, Duncan; Strauss, John.

TI Public Policy and Anthropometric Outcomes in the Cote d'Ivoire. **AU** Thomas, Duncan; Lavy, Victor; Strauss, John.

Sun, Tong-sheng

TI An Empirical Examination of the Cox, Ingersoll, and Ross Model of the Term Structure of Interest Rates. **AU** Pearson, Neil D.; Sun, Tong-sheng.

PD November 1991. **TI** The Real and Nominal Interest Rates: A Discrete-Time Model with Continuous-Time Limit. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-23; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 26. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** E31, E43, E44. **KW** Interest Rate. Term Structure. Bond Market. Inflation.

AB This paper provides a general equilibrium theory of the term structure of real interest rates in a discrete time economy. We derive the prices for the one-period and two-period real bonds and a simple recursive formula for a general k-period bond, and prove that the price formula with appropriately specified parameters converges to that in the Cox, Ingersoll, and Ross model (1985). In addition, the paper looks into the behavior of nominal bond prices in a partial equilibrium setting in which an exogenous price level process is correlated with the real economy. Finally, we provide an informal empirical investigation of the model. The results indicate that there exists a significant correlation between the price level and the real economy, and both the real interest rate and the expected inflation rate are mean-reverting.

PD November 1991. **TI** Interest Rate Swaps: Theory and Evidence. **AU** Sun, Tong-sheng; Sundaresan, Suresh; Wang, Ching. **AA** Columbia University. **SR** Columbia First Boston Series in Money, Economics and Finance Working Paper: FB-91-25; Columbia University, Graduate School of Business, First Boston Series, New York, NY 10027. **PG** 14. **PR** $5.00 academic and non-profit institutions; $6.00 corporations (add $1.00 for foreign requests). **JE** E43, G14, G24. **KW** Interest Rate. Bonds. Bond Market.
AB Received theory on interest rate swaps suggests (under some simplifying assumptions) that swap rates should be equal to the par bond yields in the London Interbank Offered Rate (Libor) market. Typically, both the swap rates and Libor trade at a spread over respective Treasury yields, reflecting a premium for liquidity and default risk. Using swap quotes from AIG (a AAA) swap dealer and Merril Lynch (a A) swap dealer, we provide empirical evidence on the relationship between swap quotes and Libor par bond yields. We find that the par bond yields are statistically different from (and higher than) the swap rates for all maturities. The magnitude by which the par bond yields exceed swap rates varies from about 9 to 12 basis points for AAA dealer and from about 14 to 15 basis points for the A dealer. This conclusion appears to be robust with respect to the statistical procedures used to estimate the par bond curve in the interbank market. Given that the bid-offer spread of the AAA dealer is about 10 basis points and that of the A dealer is about 5 basis points, we regard the difference between par bond yields and swap quotes to be economically significant for A dealer and not so for the AAA dealer.

Sundaresan, Suresh

TI Interest Rate Swaps: Theory and Evidence. **AU** Sun, Tong-sheng; Sundaresan, Suresh; Wang, Ching.

TI Quality and Timing Options in Treasury Futures Markets -- Theory and Evidence. **AU** Broadie, Mark; Sundaresan, Suresh.

Sutherland, Alan

TI Inflation Convergence with Realignments in a Two-Speed Europe. **AU** Lambertini, Luisa; Miller, Marcus; Sutherland, Alan.

Svensson, Lars E. O.

PD September 1990. **TI** Nontraded Assets in Incomplete Markets: Pricing and Portfolio Choice. **AU** Svensson, Lars E. O.; Werner, Ingrid M. **AA** Svensson: Institute for International Economic Studies, Center for Economic Policy Research, and National Bureau of Economic Research. Werner: Stanford University and Institute for International Economics Studies. **SR** Stanford Graduate School of Business Research Paper: 2005; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 32. **PR** not available. **JE** G11, G12. **KW** Portfolio Choice. Asset Pricing. Nontraded Assets. Labor Income. Optimal Hedging. Incomplete Markets. Spanning. Continuous Time.
AB This paper examines portfolio choice and asset pricing when some assets are nontraded, for instance when a country cannot trade claims to its output on world capital markets, when a government cannot trade claims to future tax revenues, or when an individual cannot trade claims to his future wages. The close relation between portfolio choice and implicit pricing of nontraded assets is emphasized. Explicit solutions are presented to the portfolio and pricing problem for special cases, including when income from the nontraded assets is a diffusion process, not spanned by traded assets, and affected by a state variable.

PD July 1991. **TI** Assessing Target Zone Credibility: Mean Reversion and Devaluation Expectations in the EMS. **AA** Stockholm University. **SR** National Bureau of Economic Research Working Paper: 3795; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** F31, E42, E43. **KW** Devaluation. Exchange Rate. Interest Rate.
AB The paper presents estimates of devaluation expectations for six EMS currencies relative to the Deutschemark, for the period March 1979 to May 1990. The estimation method is simple and operational, and consistently generates sensible results. The estimates are constructed by adjusting the interest rate differentials by subtracting estimated expected rates of depreciation within the exchange rate band. The adjustment is nontrivial because exchange rates within ERM bands display mean reversion rather than random walk (unit root) behavior. The adjustment is essential since expected rates of depreciation within the band are usually of about the same magnitude as interest rate differentials.

PD September 1991. **TI** Assessing Target Zone Credibility: Mean Reversion and Devaluation Expectations in the EMS. **AA** University of Stockholm. **SR** Centre for Economic Policy Research Discussion Paper: 580; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 19. **PR** 3 pounds ($5.00). **JE** F31, F33, E42, E43. **KW** Exchange Rate. Devaluation. Currency. Interest Rate.
AB The paper presents estimates of devaluation expectations for six EMS currencies relative to the Deutschmark, for the period March 1979-May 1990. The estimation method is simple and operational, and consistently generates sensible results. The estimates are constructed by adjusting interest rate differentials by subtracting estimated expected rates of depreciation within the exchange rate band. The adjustment is non-trivial because exchange rates within ERM bands display mean reversion rather than random walk (unit root) behavior. The adjustment is essential since expected rates of depreciation within the band are usually of about the same magnitude as interest rate differentials.

PD October 1991. **TI** Assessing Target Zone Credibility: Mean Reversion and Devaluation Expectations in the EMS. **AA** Stockholm University. **SR** International Monetary Fund Working Paper: WP/91/96; International Monetary Fund, Washington, DC 20431. **PG** 19. **PR** not available. **JE** F31, F33, E42. **KW** Exchange Rate. Devaluation. Interest Rate.
AB The paper presents estimates of devaluation expectations for six EMS currencies relative to the Deutsche mark, for the period March 1979-May 1990. The estimation method is simple and operational, and consistently generates sensible results. The

estimates are constructed by the adjusting interest rate differentials by subtracting estimated expected rates of depreciation within the exchange rate band. The adjustment is nontrivial because exchange rates within the ERM bands display mean reversion rather than random walk (unit root) behavior. The adjustment is essential since the expected rates of depreciation are usually of about the same magnitude as the interest rate differentials.

TI Devaluation Expectations: The Swedish Krona 1982-1991. **AU** Lindberg, Hans; Svensson, Lars E. O.; Soderlind, Paul.

TI How Long Do Unilateral Target Zones Last? **AU** Dumas, Bernard; Svensson, Lars E. O.

Symons, Elizabeth

TI The Simulation of Indirect Tax Reforms: The IFS Simulation Program for Indirect Taxation (SPIT). **AU** Baker, Paul; McKay, Stephen; Symons, Elizabeth.

Szekely, Istvan P.

TI Household Portfolios in Hungary, 1970-1990. **AU** Abel, Istvan; Szekely, Istvan P.

TI Export Supply and Import Demand in Hungary (An Econometric Analysis for 1968-1989). **AU** Halpern, Laszlo; Szekely, Istvan P.

Tabellini, Guido

TI External Debt and Political Instability. **AU** Ozler, Sule; Tabellini, Guido.

TI Is Inequality Harmful for Growth? Theory and Evidence. **AU** Persson, Torsten; Tabellini, Guido.

TI External Debt and Political Instability. **AU** Ozler, Sule; Tabellini, Guido.

TI The Optimality of Nominal Contracts. **AU** Freeman, Scott; Tabellini, Guido.

Takeda, Keith T.

TI Multi-Defendant Settlements: The Case of Superfund. **AU** Kornhauser, Lewis A.; Revesz, Richard L.; Takeda, Keith T.

Taylor, Alan M.

PD December 1991. **TI** Capital Flows to the New World as an Intergenerational Transfer. **AU** Taylor, Alan M.; Williamson, Jeffrey G. **AA** Harvard University. **SR** National Bureau of Economic Research Working Paper Series on Historical Factors and Long-Run Growth: 32; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** N11, N21, F21. **KW** Savings. Capital Flows. International Investment. Intergenerational Transfers.

AB Why did international capital flows rise to such heights in the late 19th century, the years between 1907 and 1913 in particular? Britain placed half of her annual savings abroad during those seven years, and 76 percent of it went to the New World countries of Canada, Australia, the U.S., Argentina, and the rest of Latin America. The resource abundant New World was endowed with dual scarcity, labor and capital. The labor supply response to labor scarcity took the form of both immigration and high fertility. This served to create much higher child dependency burdens in the New World than in the Old. Econometric analysis shows that these dependency burdens served to choke off domestic savings in the New World, thus creating an external demand for savings. The influence was very large. Indeed, it appears that the vast majority of those international capital flows from Old World to New can be explained by those dependency rate gaps. As a consequence, it is appropriate to view those large international capital flows as an intergenerational transfer.

Taylor, Lowell J.

TI The Consequences of Minimum Wage Laws: Some New Theoretical Ideas. **AU** Rebitzer, James B.; Taylor, Lowell J.

Taylor, Mark P.

PD November 1991. **TI** Intervention, Interest Rates, and Charts: Three Essays in International Finance. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/91/106; International Monetary Fund, Washington, DC 20431. **PG** 16. **PR** not available. **JE** G15, F31. **KW** Exchange Rate. Interest Rate. Market Forecasting.

AB This paper contains essays on sterilized intervention, on covered interest rate parity, and on chartist analysis in financial markets. Each essay contains a definition, brief survey of the empirical evidence and overall assessment of each topic.

TI Common Currency Areas and Currency Unions: An Analysis of the Issues. **AU** Masson, Paul R.; Taylor, Mark P.

Thisse, Jacques-Francois

TI Infinite Horizon Spatial Duopoly with Collusive Pricing and Noncollusive Location Choice. **AU** Friedman, James W.; Thisse, Jacques-Francois.

Thomas, Duncan

PD May 1990. **TI** Prices, Infrastructure, Household Characteristics and Child Height. **AU** Thomas, Duncan; Strauss, John. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 602; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 28. **PR** $2.00 + postage. **JE** D11, J13, O11. **KW** Economic Development. Consumer Economics. Children. Brazil.

AB Household survey data from Brazil, matched with information collected at he municipio (county) level, are used to examine the relation between arental characteristics, community characteristics, and child height. ata are drawn from two sources. Informacoes Basicas Municipais is a eriodic survey of every municipio in Brazil which gathers data on the vailability of infrastructure, health and education services. Estudo acional da Despesa Familiar is a household survey with information on ncome, expenditure, anthropometry and household socio-demographic haracteristics. These data are also used to create local food price ndices. Child height is significantly affected by local infrastructure, n particular the availability of modem sewerage, piped water and lectricity. These effects are stronger for older children, for those of etter educated mothers and for those from higher expenditure households. igher prices of sugar and dairy products are associated with lower child eight, significantly for children of illiterate mothers.

PD October 1991. **TI** Public Policy and Anthropometric

Outcomes in the Cote d'Ivoire. **AU** Thomas, Duncan; Lavy, Victor; Strauss, John. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 643; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven, CT 06520. **PG** 36. **PR** $2.00 + postage. **JE** J13, I12, I18. **KW** Children. Public Health. Public Spending. Medical Care.

AB Using data from the Cote d'Ivoire, we examine the impact of public policies on three anthropometric outcomes: height for age and weight for height of children as well as body mass index of adults. During the eighties, low growth rates in the Cote d'Ivoire were accompanied by an economic adjustment program which included substantial cuts in public spending together with increases in the relative price of foods. If reductions in social spending resulted in lower availability and quality of health care services, then our results suggest that child health (particularly height for age) will have been adversely affected. The provision of basic services (such as immunizations) and ensuring facilities are equipped with simple materials (such as having basic drugs in stock) will yield high social returns in terms of improved child health. Food prices have tended to rise in the Cote d'Ivoire during the eighties and we find that higher food prices have had a significantly detrimental impact on the health of Ivorian children (as measured by weight for height) and adults (as indicated by lower body mass indices). In contrast, the effects of income on health are significant but quite small, except in the case of adult women.

Trajtenberg, Manuel

TI Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations. **AU** Jaffe, Adam B.; Trajtenberg, Manuel; Henderson, Rebecca.

Trejo, Stephen J.

TI Self-Selection and Internal Migration in the United States. **AU** Borjas, George J.; Bronars, Stephen G.; Trejo, Stephen J.

Tsibouris, George C.

PD October 1991. **TI** Persistence in the Variability of Daily Exchange Rates. **AA** University of Wisconsin, Madison. **SR** International Monetary Fund Working Paper: WP/91/104; International Monetary Fund, Washington, DC 20431. **PG** 18. **PR** not available. **JE** F31, G15. **KW** Exchange Rate. Market Information. Market Speculation. Market Volatility.

AB Rational speculation in foreign exchange trading is often assumed to dampen exchange rate fluctuations by bringing the market back to fundamentals. Nevertheless, information congestion provides incentives for traders to follow positive feedback strategies which result in persistent and volatile exchange rate behavior by magnifying the impact of exogenous shocks. Empirical evidence is presented which is consistent with such autocatalytic effects.

Turnovsky, Stephen J.

PD November 1991. **TI** The Impact of Terms of Trade Shocks on a Small Open Economy: A Stochastic Analysis. **AA** University of Washington and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3916; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 23. **PR** $3.00. **JE** O19, F43, F41. **KW** Economic Growth. Trade Shocks. Current Account. International Trade. Open Economy.

AB This paper investigates the impact of change in the terms of trade on the economic performance of a small economy. Both the effects of unanticipated shocks and changes in the mean and variance of the probability distribution generating these disturbances are discussed. In all cases, the key element determining the response of the economy is the effect on the rate of growth of real wealth, to which all other real quantities are directly tied in equilibrium. Conditions for the Harberger-Laursen-Metzler effect to hold are discussed. The impact of these changes on economic welfare, as measured by expected discounted utility of the representative agent is also addressed.

Van der Ploeg, Frederick

PD August 1991. **TI** Unanticipated Inflation and Government Finance: A Case for an Independent Common Central Bank. **AA** Universiteit van Tilburg. **SR** Centre for Economic Policy Research Discussion Paper: 562; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 36. **PR** 1 pound ($2) individuals; 1.50 pounds ($3) companies, libraries, institutions. **JE** E58, F36, F34. **KW** Central Bank. Inflation. Public Debt. Financial Integration.

AB This paper discusses the merits of an independent "EuroFed" within the context of a tax/seigniorage smoothing model for a monetary union. There is an incentive to use a surprise inflation tax to wipe out the real value of government debt and wage contracts because this allows a cut in distortionary taxes and boosts employment and private consumption. If dependent central banks can pre-commit there is no case for an independent EuroFed as this leads to a sub-optimal government revenue mix. If only an independent EuroFed can guarantee sufficient discipline, however, a case can be made for it over and above a monetary union with a noncooperative or cooperative central bank. This case is stronger when the aversion to inflation is high, when the outstanding stock of nominal government debt is high, when the underground economy is insignificant and when there is little wage indexation.

van Wijnbergen, Sweder

TI Transition Problems in Economic Reform: Agriculture in the Mexico-U.S. Free Trade Agreement. **AU** Levy, Santiago; van Wijnbergen, Sweder.

Venables, Anthony J.

PD December 1991. **TI** A Customs Union with a Continuum of Products. **AA** University of Southampton. **SR** Centre for Economic Policy Research Discussion Paper: 605; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, UNITED KINGDOM. **PG** 29. **PR** 3.00 pounds or $5.00. **JE** F13, F15. **KW** Economic Integration. Customs Union. Trade Policy.

AB This paper analyzes the customs union problem in a model containing a continuum of products. The continuum is in three dimensions, so that three countries each have a distinct comparative advantage. Trade patterns are endogenously determined, and changed by policy. This is in the tradition of Viner, but in contrast to recent models in which the direction of trade is exogenously given. The effects of internal liberalization of trade patterns and consequent welfare effects through trade creation, diversion, and modification are established. Optimal policies are characterized, and sufficient conditions for tariff reform to raise welfare are found. Interactions between internal and external policy are analyzed.

Verdier, Thierry

TI Education, Democracy and Growth. **AU** Saint-Paul, Gilles; Verdier, Thierry.

TI Privatization in Eastern Europe: Irreversibility and Critical Mass Effects. **AU** Roland, Gerard; Verdier, Thierry.

Villaflor, Georgia C.

TI The Market for Manufacturing Workers during Early Industrialization: The American Northeast, 1820 to 1860. **AU** Sokoloff, Kenneth L.; Villaflor, Georgia C.

Vinals, Jose

TI Investigating Private and Public Saving-Investment Gaps in EC Countries. **AU** Ballabriga, Fernando C.; Dolado, Juan J.; Vinals, Jose.

Vishny, Robert

TI Pervasive Shortages under Socialism. **AU** Shleifer, Andrei; Vishny, Robert.

Vishwanath, Tara

TI Information Sources and Equilibrium Wage Outcomes. **AU** Mortensen, Dale T.; Vishwanath, Tara.

PD August 1991. **TI** Parallel Search: An Application to R&D. **AA** Northwestern University. **SR** Northwestern Center for Mathematical Studies in Economics and Management Science Working Paper: 957; J.L. Kellogg Graduate School of Management, Northwestern University, 2001 Sheridan Road, Evanston, IL 60208. **PG** 28. **PR** $3.00 U.S. and Canada; $5.00 via international mail. **JE** O32, O22, G31. **KW** Search Model. R&D. Project Analysis. Investment.

AB This paper examines R&D race models viewing the problem of project investments by firms in a search framework. Such an approach is appropriate when the outcome or performance level of each project is uncertain. The general context of the R&D problem considered may be roughly described as follows. Each firm has a certain number of, possibly different, projects. The uncertainty associated with each can be removed by paying a search or an exploration cost. Competing firms invest in search, simultaneously, selecting one or more projects each time. The outcomes produced from search can be carried over into the future. Reward is collected when all firms terminate search. The reward structure is winner-take all, i.e., the firm which has produced the highest outcome from the search it undertook, gets all of it; and the reward for other firms (producing a lesser outcome) is zero. The objective for each firms is to maximize the expected discounted reward net of the search cost it pays, by selecting an appropriate search strategy to explore its set of projects.

Von Hagen, Jurgen

TI From EMS to EMU. **AU** Fratianni, Michele; Von Hagen, Jurgen; Waller, Christopher.

Wachter, Susan

TI Clustering Methods and Commercial Rents. **AU** Goetzmann, William N.; Wachter, Susan.

Wadsworth, Jonathan

TI Strike Incidence and Duration in British Manufacturing Industry in the 1980's. **AU** Ingram, Peter; Metcalf, David; Wadsworth, Jonathan.

Waller, Christopher

TI From EMS to EMU. **AU** Fratianni, Michele; Von Hagen, Jurgen; Waller, Christopher.

Wang, Ching

TI Interest Rate Swaps: Theory and Evidence. **AU** Sun, Tong-sheng; Sundaresan, Suresh; Wang, Ching.

Wang, Z.-K.

PD November 1991. **TI** The Trading Potential of Eastern Europe. **AU** Wang, Z.-K.; Winters, L. Alan. **AA** University of Birmingham. **SR** Centre for Economic Policy Research Discussion Paper: 610; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6lA, ENGLAND. **PG** 31. **PR** 3 pounds ($5.00). **JE** F14, F13, F15. **KW** Europe. Trade Model. Imports. Trade Policy. Trade Theory.

AB This paper fits a gravity model to the trade of 76 market economies. It then applies the model to data on East European economies to estimate what their trading potential might have been, had they behaved like market economies in the mid-1980's. At existing levels of national income, the liberalization of Eastern Europe and the Soviet Union is unlikely to affect their mutual trade and trade with developing countries, but it will increase trade with industrial counties by factors of three to thirty. West Germany and the U.S.A. are the principal beneficiaries of this new trade, increasing their exports and imports by over 20%. Trade must flow both ways, however: the West cannot increase its exports to the East without correspondingly increasing its imports.

Waud, Roger N.

TI On the Optimality of Reserve Requirements. **AU** Cothren, Richard D.; Waud, Roger N.

Webb, Steven

TI Why are there so Many Long Term Sick in Britain? **AU** Disney, Richard; Webb, Steven.

TI TAXBEN2: The New IFS Tax Benefit Model. **AU** Johnson, Paul; Stark, Graham; Webb, Steven.

Weber, Axel A.

PD January 1992. **TI** Time-Varying Devaluation Risk, Interest Rate Differentials and Exchange Rates in Target Zones: Evidence from the EMS. **AA** Universat Gesamthochchule, Germany. **SR** Centre for Economic Policy Research Discussion Paper: 611; Centre for Economic Policy Research, 6 Duke of York Street, London SW1Y 6LA, ENGLAND. **PG** 22. **PR** 3 pounds ($5.00). **JE** E42, E43, F31, F33. **KW** Target Zone. Exchange Rate. Interest Rate. European Monetary System. Devaluation.

AB Stylized empirical facts on the behavior of exchange rates and interest rate differentials in target zone arrangements are at odds with the predictions of the simple (fully credible) target zone model. Incorporating time-varying devaluation risk in target zone models enriches the data generating structures and provides an interesting interpretation of the variability which standard target zone models leave unexplained. By using Bayesian time-varying parameter regression, the present paper shows that stochastic devaluation risk actually explains EMS data quite well. Three key findings should be stressed. First, estimates of expected devaluation rates have recently declined significantly, but devaluation risk has not yet been completely eliminated. Second, expected devaluation rates display "hysteresis." This contaminates many of the relationships postulated by target zone models with noise, but adjusting for expected devaluation rates frequently reveals almost noise-free relationships, which strongly supports the predictions of the theory. Finally, the estimates of expected devaluation rates suggest that some of the early EMS realignments were largely anticipated by the market.

Weber, Guglielmo

TI Consumption, Productivity Growth and the Interest Rate. **AU** Attanasio, Orazio P.; Weber, Guglielmo.

Weber, Robert

TI An Experiment on Coordination in Multi-Candidate Elections: The Importance of Polls and Election Histories. **AU** Forsythe, Robert; Myerson, Roger B.; Rietz, Thomas; Weber, Robert.

Wei, Shang-Jin

PD November 1991. **TI** Are Option-Implied Forecasts of Exchange Rate Volatility Excessively Variable? **AU** Wei, Shang-Jin; Frankel, Jeffrey A. **AA** University of California, Berkeley. **SR** National Bureau of Economic Research Working Paper: 3910; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** 28. **PR** $3.00. **JE** G15, G14, F31. **KW** Forecasting. Exchange Rate. Market Efficiency. Foreign Exchange.

AB Market participants' forecasts of future exchange rate volatility can be recovered from option contracts on foreign currencies. Such implicit volatility forecasts for four currencies are used to test rational expectations jointly with the applicability of the standard Black-Scholes formula. First, we examine the null hypothesis that the market-anticipated one-month-ahead standard deviation is an unbiased estimator of the subsequent realized standard deviation. The parametric regression method rejects this hypothesis overwhelmingly: the implicit forecasts are themselves excessively variable. Simulations indicate that the rejection is not caused by non-normality of the error term. Second, we use a nonparametric method to test a weaker version of market rationality: the market can correctly forecast the direction of the change in exchange rate volatility. This time, we investigate how market forecasts are formed. We find some evidence that market participants put heavy weight on lagged volatility when forecasting future volatility. Finally, results from the alternating conditional expectations algorithm provide further support for the central finding that when the market predicts a large deviation of volatility from its mean, it could do better by moderating its forecast.

Weil, Philippe

TI Menus of Linear Income Tax Schedules. **AU** Alesina, Alberto; Weil, Philippe.

PD January 1992. **TI** Equilibrium Asset Prices with Undiversifiable Labor Income Risk. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 3975; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G12, D81, D11. **KW** Risk Free Rate. Equity Premium. Representative Agents. Asset Pricing.

AB In a two-period Lucas tree economy in which ex ante identical, but ex post dissimilar, agents face undiversifiable labor income risk, calibrating a (wrong) representative agent model results in overstating the equilibrium risk free rate and in understating the equilibrium equity premium if the utility function exhibits decreasing absolute risk aversion and decreasing absolute prudence. These behavioral assumptions provide, as a consequence, a theoretical rational for the often advanced conjecture that non-traded risk contributes to the solution of the risk free rate and equity premium puzzles.

TI Precautionary Saving and Consumption Smoothing across Time and Possibilities. **AU** Kimball, Miles S.; Weil, Philippe.

TI Menus of Linear Income Tax Schedules. **AU** Alesina, Alberto; Weil, Philippe.

TI Dynamic Efficiency, The Riskless Rate, and Debt Ponzi Games under Uncertainty. **AU** Blanchard, Olivier Jean; Weil, Philippe.

Weiner, Robert J.

TI Long-Term Contracting and Multiple-Price Systems. **AU** Hubbard, R. Glenn; Weiner, Robert J.

Weir, David R.

PD August 1989. **TI** An Historical Perspective on the Economic Consequences of Rapid Population Growth. **AA** Yale University. **SR** Yale Economic Growth Center Discussion Paper: 600; Economic Growth Center, Yale University, Box 1987, Yale Station, New Haven CT 06520. **PG** 39. **PR** $2.00 + postage. **JE** N33, N13. **KW** Wages. Population. Economic History. Income Distribution.

AB The economic consequences of population growth constitute an important topic for historians and development economists alike. Quantitative historical studies have been mainly confined to time series analyses of English data, showing very large negative responses of real wages to population growth. These results are shown to be not robust to alternative specifications, partly due to limitations of the data. This paper re- examines the question in two ways: by using single country time series of land rents instead of wages, and by estimating wage responses from a newly constructed panel data set of the six largest European economies from 1500 to 1800. The new results show less dramatic negative consequences of population growth for real wages than did earlier studies, but the magnitude of the effect remains larger than expected from simple diminishing returns in a production function with reasonable factor substitution possibilities.

Wen, Quan

TI Perfect Equilibria in a Negotiation Model. **AU** Busch, Lutz-Alexander; Wen, Quan.

Werner, Ingrid M.

TI Nontraded Assets in Incomplete Markets: Pricing and Portfolio Choice. **AU** Svensson, Lars E. O.; Werner, Ingrid M.

PD October 1990. **TI** Capital Income Taxation and International Portfolio Choice. **AA** Stanford University. **SR** Stanford Graduate School of Business Research Paper: 1101; Graduate School of Business, Stanford University, Stanford, CA 94305-5015. **PG** 33. **PR** not available. **JE** H21, H24, D91, G11. **KW** Portfolio Choice. Hedging. Capital Taxes. Taxation. Savings. Transfers. Optimal Hedging. Continuous Time.

AB The result that proportional capital income taxation on all assets encourages risk taking is shown to collapse in a general equilibrium setting. With random returns to investment, there will not be a dichotomy between distortions to savings and to investment decisions. Residence based taxation cause only savings distortions, while asymmetric taxation across risky assets and non-uniform corporate taxation across economies distort both savings and investment decisions. Substitutability in a diversification sense determines the extent of the investment distortion while the intertemporal elasticity of substitution and the implicit value of the claim to transfers determine the direction of the savings distortion.

Whitehouse, Edward

TI Do Wage Differentials Compensate Occupational Pension Entitlements?
Preliminary Look at the Evidence. **AU** Disney, Richard; Whitehouse, Edward.

Williams, Mark D.

TI Firm-Level Productivity and Management Influence: A Comparison of U.S. and Japanese Automobile Producers. **AU** Lieberman, Marvin B.; Lau, Lawrence J.; Williams, Mark D.

Williamson, Jeffrey G.

TI Capital Flows to the New World as an Intergenerational Transfer. **AU** Taylor, Alan M.; Williamson, Jeffrey G.

PD February 1992. **TI** The Evolution of Global Labor Markets in the First and Second World Since 1830: Background Evidence and Hypotheses. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper on Historical Factors and Long-Run Growth: 36; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** N11, N12. **KW** Industrialization. Wages. GNP. Economic Growth.

AB Debate over the economic convergence of currently industrialized nations has suffered a number of shortcomings. First, the underlying data base has typically been limited to Agnus Maddison's GNP and GNP per worker hour. This paper offers a new data base, purchasing power parity adjusted real wage rates for unskilled labor. Second, the debate has typically focused on endpoints from the 19th century to the present, paying little attention to differential behavior in four distinct regimes: 1830 to the late 1850's, the 1850's to World War I, the interwar decades, and the post-World War II experience. Third, with some recent exceptions, the search for explanations has focused primarily on technological advance, while ignoring the potential role of global factor and commodity market integration (and disintegration). The new real wage data base confirms some old stylized facts and offers some new ones. It also points out how these four regimes differed. They differed enough to suggest that different explanations will be necessary to account for the convergence over the past century and a half.

Williamson, Stephen D.

PD July 1991. **TI** Barter and Monetary Exchange under Private Information. **AU** Williamson, Stephen D.; Wright, Randall. **AA** Williamson: University of Western Ontario. Wright: University of Pennsylvania. **SR** University of Western Ontario Department of Economics Research Report: 9107; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 37. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** L15, D51, D82. **KW** Commodities. Product Quality. Information.

AB We analyze economies with private information concerning the quality of commodities. Without private information there is a nonmonetary equilibrium with only high quality commodities produced, and money cannot improve welfare. With private information there can be equilibria with bad quality commodities produced, and sometimes the only nonmonetary equilibrium is degenerate. The use of money can lead to active (i.e., nondegenerate) equilibria when no active nonmonetary equilibrium exists. Even when active nonmonetary equilibria exist, with private information money can increase welfare via its incentive effects: in monetary equilibrium, agents may adopt trading strategies that discourage production of low quality output.

TI Currency Elasticity and Banking Panics: Theory and Evidence. **AU** Champ, Bruce; Smith, Bruce D.; Williamson, Stephen D.

PD September 1991. **TI** Liquidity and Market Participation. **AA** University of Western Ontario. **SR** University of Western Ontario Department of Economics Research Report: 9110; Department of Economics, Social Sciences Center, University of Western Ontario, London, Ontario, CANADA N6A 5C2. **PG** 46. **PR** $5.00 Canada; $7.00 Elsewhere. **JE** D52, G11. **KW** Asset Markets. Portfolio Choice. Incomplete Markets.

AB A model of market participation in competitive asset markets is constructed. There are two assets, a liquid asset traded without cost, and an illiquid asset traded subject to fixed transactions costs. Agents have random needs for liquidity, but they are precluded from trading claims contingent on their type, and from diversifying between assets. The model has a participation externality, but in contrast to related work the competitive equilibrium is unique, and there can be an underprovision of liquidity (too much participation in the market for the illiquid asset) in equilibrium. Some computational experiments illustrate possible equilibrium outcomes and welfare results.

Wilson, Charles

PD December 1991. **TI** Incomplete Markets. **AA** New York University. **SR** New York University Economic Research Reports: 91-63; New York University, Faculty of Arts and Science, Department of Economics, Washington Square, New York, N.Y. 10003. **PG** 12. **PR** no charge. **JE** D52. **KW** Incomplete Markets.

AB This paper provides a brief summary of some of the essential issues and results in the theory of incomplete markets.

TI A Model of Project Evaluation with Limited Resources. **AU** Gifford, Sharon; Wilson, Charles.

Winters, L. Alan

TI The Trading Potential of Eastern Europe. **AU** Wang, Z.-K.; Winters, L. Alan.

Wooton, Ian

TI Income Inequality and International Migration. **AU** Davies, James B.; Wooton, Ian.

Wright, Brian D.

TI Sovereign Debt Renegotiation in a Consumption-Smoothing Model. **AU** Kletzer, Kenneth M.; Wright, Brian D.

Wright, Randall

TI Barter and Monetary Exchange under Private Information. **AU** Williamson, Stephen D.; Wright, Randall.

Wyplosz, Charles

TI Human Capital, Investment and Migration in an Integrated Europe. **AU** Burda, Michael; Wyplosz, Charles.

TI Labour Mobility and German Integration: Some Vignettes. **AU** Burda, Michael; Wyplosz, Charles.

Yanagawa, Noriyuki

PD February 1992. **TI** Asset Bubbles and Endogenous Growth. **AU** Yanagawa, Noriyuki; Grossman, Gene M. **AA** Yanagawa: Princeton University and University of Tokyo. Grossman: Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 4004; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** G12, O41, E21, E13. **KW** Asset Pricing. Productivity. Savings. Bubbles. Growth Rate. Endogenous Growth.

AB We study the interaction between productive and non-productive savings in an economy that grows in the long-run due to endogenous improvements in labor productivity. As in the neoclassical growth setting with overlapping generations studied by Tirole (1985), asset bubbles can exist in an economy with endogenous growth provided they are not too large and that the growth rate in the equilibrium without bubbles exceeds the interest rate. Since the growth rate in the bubbleless equilibrium is endogenous, the existence conditions reflects parameters of tastes and technology. We find that bubbles, when they exist, retard the growth of the economy, perhaps even in the long-run, and reduce the welfare of all generations born after the bubble appears.

Yeung, Bernard

TI Income Shifting in U.S. Multinational Corporations. **AU** Harris, David; Slemrod, Joel; Yeung, Bernard; Morck, Randall.

Zame, William R.

TI Non-Atomic Economies and the Boundaries of Perfect Competition. **AU** Ostroy, Joseph M.; Zame, William R.

Zarnowitz, Victor

PD January 1992. **TI** Twenty-Two Years of the NBER-ASA Quarterly Economic Outlook Surveys: Aspects and Comparisons of Forecasting Performance. **AU** Zarnowitz, Victor; Braun, Philip. **AA** Zarnowitz: University of Chicago and National Bureau of Economic Research. Braun: Northwestern University. **SR** National Bureau of Economic Research Working Paper: 3965; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **PG** not available. **PR** $3.00. **JE** E17, E27, E37, E47. **KW** Forecast Evaluation. Time Series. Forecasting. Macroeconomic Models.

AB The National Bureau of Economic Research, in cooperation with the American Statistical Association, conducted a regular quarterly survey of professional macroeconomic forecasters for 22 years beginning in 1968. The survey produced a mass of information about characteristics and results of the forecasting process. Many studies have already used some of this material, but this is the first comprehensive examination of all of it. This report addresses several subjects and produces findings on each as follows: 1) The distribution of error statistics across the forecasters: the dispersion among the individual predictions is often large and it typically increases with forecast horizon, as do the mean absolute (or squared) errors. 2) The role of the time-series properties of the target data: the more volatile the time series, the larger as a rule are the errors of the forecasts. 3) The role of revisions in "actual" data: forecast errors tend to be larger the greater the extent of the revisions.

Zeckhauser, Richard

TI The Australian Pharmaceutical Subsidy Gambit: Transmuting Deadweight Loss and Oligopoly Rents to Consumer Surplus. **AU** Johnston, Mark; Zeckhauser, Richard.

Zilcha, Itzhak

TI The Effects of Compulsory Schooling on Growth Income Distribution and Welfare. **AU** Eckstein, Zvi; Zilcha, Itzhak.

Zin, Stanley E.

TI The Independence Axiom and Asset Returns. **AU** Epstein, Larry G.; Zin, Stanley E.