

ABSTRACTS OF WORKING PAPERS IN ECONOMICS

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Abowd, John M.

PD March 1996. **TI** Compensation Structure and Product Market Competition. **AU** Abowd, John M.; Allain, Laurence. **AA** Abowd: Cornell University and National Bureau of Economic Research. Allain: Cornell University. **SR** National Bureau of Economic Research Working Paper: 5493; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 14. **PR** \$5.00. **JE** J33. **KW** Opportunity Cost. Worker Quasi-Rent. Product Markets. Collective Bargaining. Compensation Structure.

AB The inability to measure the opportunity cost of labor has plagued analyses of firm-level compensation policies for many years. Using a newly constructed data set of French workers and firms, we estimate the opportunity cost of the employees' time based on a measure of the person-effect in the wage equations (derived from Abowd, Kramarz and Margolis 1994). We then make direct calculations of the quasi-rent per worker at each firm and the conditions within that firm's product market, as measured by international prices, using a representative sample of private French firms. We find that quasi-rents per worker are only mildly related to the structure of the French product market. The systematic variation in our quasi-rents is related to international market prices and work force structure, however, producing an estimate of bargaining power for the employees of about 0.4. This estimate, while slightly larger than other estimates, may be quite reasonable for the workers in an economy in which the vast majority of jobs are covered by industry-level collective bargaining agreements.

PD April 1996. **TI** The Entry and Exit of Workers and the Growth of Employment: An Analysis of French Establishments. **AU** Abowd, John M.; Corbel, Patrick; Kramarz, Francis. **AA** Abowd: Cornell University and National Bureau of Economic Research. Corbel and Kramarz: CREST. **SR** National Bureau of Economic Research Working Paper: 5551; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** E24, J62, J64. **KW** Workers Flows. Job Creation. Job Destruction. Firm-Initiated Separations.

AB Our empirical analyses distinguish between flows of workers, directly measured, and job creation and destruction, again, directly measured. We use a representative sample of all French establishments for 1987 to 1990. Our most important findings are that (1) annual job creation can be characterized as hiring three persons and separating two for each job created in a given year; (2) annual job destruction can be characterized as hiring one person and separating two for each job destroyed in a given year; (3) two-thirds of all hiring are short term contracts and more than half of all separations are due to the end of these

short term contracts; (4) when an establishment is shrinking the adjustment is made by reducing entry (short and long contracts, and transfers) and not changing the separation rates; (5) for the highest skill groups ten percent of months with firm-initiated exits also have new hiring in the same skill group and for the lowest skill groups 25 percent of the months with firm-initiated separations also have new hiring in that skill group; (6) approximately one-third of all short-term employment contracts are converted to long-term contracts at their termination; (7) most workers flows are procyclical; (8) employment adjustment occurs primarily through changes in the entry rates (often of short-term contract workers and not through exit rates (except for quits); and (9) the rate of internal promotion into higher skilled positions is about three times the size of net employment changes inside the job category.

Acemoglu, Daron

PD June 1996. **TI** Why Do Firms Train? Theory and Evidence. **AU** Acemoglu, Daron; Pischke, Jorn-Steffen. **AA** Acemoglu: Massachusetts Institute of Technology. Pischke: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5605; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** D82, E24, J24, J31, J42. **KW** Monopsony. Asymmetric Information. Germany. Employee Training.

AB This paper offers and tests a theory of training whereby workers do not pay for general training they receive. The crucial ingredient in our model is that the current employer has superior information about the worker's ability relative to other firms. This informational advantage gives the employer an ex-post monopsony power over the worker which encourages the firm to provide training. We show that the model can lead to multiple equilibria. In one equilibrium quits are endogenously high, and as a result employers have limited monopsony power and are willing to supply only little training, while in another equilibrium quits are low and training high. We also derive predictions from our model not shared by other explanations of firm sponsored training. Using microdata from Germany, we show that the predictions of the specific human capital model are rejected, while our model receives support from the data.

PD February 1997. **TI** Efficient Wage Dispersion. **AU** Acemoglu, Daron; Shimer, Robert. **AA** Acemoglu: Massachusetts Institute of Technology. Shimer: Princeton University. **SR** Centre for Economic Policy Research Discussion Paper: 1572; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 44. **PR** 4 pounds or \$8.00. **JE** D83, J31, J41. **KW** Efficiency. Search. Search Intensity. Sorting. Wage

Dispersion. Wage Posting.

AB In market economies identical workers appear to receive very different wages, violating the "law of one price" of Walrasian markets. It is argued in this paper that in the absence of a Walrasian auctioneer to coordinate trade: (i) wage dispersion among identical workers is very often an equilibrium phenomenon; and (ii) such dispersion is necessary for a market economy to function. The paper analyzes an environment in which firms post wages and workers may, at a small cost, observe one or more of the posted wages, i.e. search, before deciding where to apply. Both with homogeneous and heterogeneous forms, equilibrium wage dispersion is necessary for the economy to approximate efficiency. Without wage dispersion, workers do not search, and wages are depressed. As a result: (a) there is excessive entry of firms; and (b) because, in the absence of search, high-productivity firms cannot attract workers faster than low-productivity firms, their relative profitability is reduced, and technology choices are distorted.

PD March 1997. **TI** Good Jobs versus Bad Jobs: Theory and Some Evidence. **AA** Massachusetts Institute of Technology. **SR** Centre for Economic Policy Research Discussion Paper: 1588; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 56. **PR** 4 pounds or \$8.00. **JE** D83, J24, J31. **KW** Job Composition. Minimum Wages. Search. Unemployment Insurance. Wage Differentials.

AB This paper offers a model of the interaction between composition of jobs and labor market regulation. Ex-post rent-sharing due to search frictions implies that "good" jobs which have higher creation costs must pay higher wages. This wage differential distorts the composition of jobs, and in the unregulated equilibrium there are too many bad jobs relative to the number of good jobs. Minimum wages and unemployment insurance encourage workers to wait for higher wages, and therefore induce firms to shift the composition of employment towards good jobs. As a result, such regulations, even though they will often increase unemployment, will increase average labor productivity and may improve welfare. The paper then briefly investigates the empirical importance of this interaction using data from the United States. The results suggest that the composition of jobs improves considerably in response to higher minimum wages and more generous unemployment benefits.

PD May 1997. **TI** Setting Standards: Information Accumulation in Development. **AU** Acemoglu, Daron; Zilibotti, Fabrizio. **AA** Acemoglu: Massachusetts Institute of Technology. Zilibotti: Universitat Pompeu Fabra. **SR** Centre for Economic Policy Research Discussion Paper: 1641; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 34. **PR** 4 pounds or \$8.00. **JE** D82, M13, O14, O40. **KW** Information. Development. Agency Costs. Incentives. Relative Performance Evaluation. Risk Sharing. Sectoral Transformations.

AB This paper proposes a model in which economic relations and institutions in advanced and less-developed economies differ as these societies have access to different amounts of information. This lack of information makes it hard to give the right incentives to managers and entrepreneurs. We argue that differences in the amount of information arise because of the differences in the scale of activities in rich and poor economies; namely, there is too little repetition of similar activities in poor economies, thus insufficient information to set the appropriate

standards for firm performance. The model predicts a number of institutional and structural transformations as the economy accumulates capital and information.

Adams, James D.

PD April 1996. **TI** Bounding the Effects of R&D: An Investigation Using Matched Establishment-Firm Data. **AU** Adams, James D.; Jaffe, Adam B. **AA** Adams: University of Florida and National Bureau of Economic Research. Jaffe: Brandeis University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5544; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** D24, O32. **KW** Research and Development. Factor Productivity.

AB Studies of firm-level data have shown that a firm's R&D and the R&D of other firms increase conventional factor productivity. We investigate these phenomena further by examining the relationship between plant-level productivity and firm-level R&D. We find that (1) the productivity-enhancing effects of parent firm R&D are diminished by geographic distance from the research lab and "technological" distance between the product-field focus of the R&D and the plants; (2) productivity appears to depend on the intensity of parent firm R&D (R&D per plant), not on the total amount; and (3) spillovers of research effects from technologically related firms are significant but also depend on R&D intensity rather than total industry R&D. These results suggest that, despite the externalities created by spillovers of R&D, the "dilution" of R&D across multiple target plants reduces its potency sufficiently that spillovers may not be a source of industry-wide or economy-wide increasing returns.

Addison, John

PD June 1996. **TI** Trade Sensitivity, Technology, and Labor Displacement. **AU** Addison, John; Fox, Douglas; Ruhm, Christopher J. **AA** Addison: University of Hull. Fox: Pennsylvania State University- Shermango. Ruhm: University of North Carolina Greensboro and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5621; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** E24, F10, J40, J64, O30. **KW** Technology. Employment. International Trade. Computers.

AB This study examines the relationship between international trade, technology, and the probability and consequences of job displacement, using data on displaced workers as well as those at risk of job dislocation for 1984-86 and 1989-91. Workers employed in industries with elevated import shares and high levels of investment in computers appear to have increased rates of job loss, with the results for export penetration varying on the time period examined. These risks do not, however, translate into unfavorable post-displacement labor market outcomes. Indeed, there is some evidence that individuals displaced from export-oriented sectors have fewer adjustment problems than the generality of dislocated workers, while those terminated from sectors investing heavily in computer technologies are more likely to retain health insurance coverage. Our findings are frequently sensitive to the choice of specifications and time periods.

Agenor, Pierre-Richard

PD January 1997. **TI** Fiscal Imbalances, Capital Inflows, and the Real Exchange Rate: The Case of Turkey. **AU** Agenor, Pierre-Richard; McDermott, C. John; Ucer, E. Murat. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/01; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 16. **PR** not available. **JE** E31, E62, F31, F32, F34. **KW** Turkey. Exchange Rates. Capital Inflows. Interest Rates. Fiscal Policy.

AB This paper examines the links between fiscal policy, capital inflows, and the real exchange rate in Turkey since the late 1980's. After an overview of recent macroeconomic developments in Turkey, a vector autoregression model is estimated linking government spending, interest rate differentials, capital flows, and the temporary component of the real exchange rate. Positive shocks to government spending and capital inflows lead to an appreciation of the temporary component of the real exchange rate, whereas positive shocks to the interest rate differential lead to a capital inflow and an appreciation of the temporary component of the real exchange rate. The findings highlight the role of fiscal adjustment in restoring macroeconomic stability.

PD July 1997. **TI** Borrowing Risk and Tequila Effect. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/86; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** E32, E44, F32, F34, G21. **KW** Default Risk. Intertemporal Models. Argentina. Risk Premium. Capital Markets.

AB This paper models the Tequila effect (triggered by the collapse of the Mexican peso in December 1994) as a temporary increase in the risk premium faced by domestic private borrowers on world capital markets. The effects of this shock are studied in an intertemporal optimizing framework where firms' demand for working capital is financed by bank credit. Under the assumption that the perceived duration of the shock is sufficiently long, the model is capable of reproducing some of the main features of Argentina's economic downturn in the aftermath of the collapse of the Mexican peso: the rise in domestic interest rates, the reduction in net private capital inflows and the drop in official reserves, the reduction in bank deposits and credit supply, the fall in private consumption, the contraction in output, and the increase in unemployment.

Aizenman, Joshua

PD May 1996. **TI** Optimal Tax and Debt Policy with Endogenously Imperfect Creditworthiness. **AU** Aizenman, Joshua; Gavin, Michael; Hausmann, Ricardo. **AA** Aizenman: Dartmouth College and National Bureau of Economic Research. Gavin and Hausmann: Inter-American Development Bank. **SR** National Bureau of Economic Research Working Paper: 5558; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** not available. **PR** \$5.00. **JE** E62, H21, H63. **KW** Optimal Taxation. Debt Policy. Imperfect Creditworthiness.

AB This paper shows that the pattern of optimal tax rates and borrowing in the presence of endogenous borrowing constraints differ considerably from the patterns observed with fully integrated capital markets. We study a developing country characterized by a costly tax collection. Its access to the international credit market is determined by the efficiency of

the tax system and the relative bargaining power of creditors. Partial defaults induce a "burden shifting" from bad to good states of nature, reducing the cost of borrowing, implying that a switch from no default to a partial regime is associated with a borrowing boom. The switch to a partial default regime is associated with financial fragility, where small adverse changes in fundamentals lead to a large accumulation of debt. The tax rate exhibits strong counter-cyclical patterns in economies operating at the credit ceiling, whereas the tax rate exhibits strong procyclical patterns in economies operating on the upward sloping portion of the supply of credit, and very little cyclical patterns in economies operating on the elastic portion of the supply of credit. We identify a volatility-debt curve for a given realization of output. With low debt, higher volatility tends to reduce borrowing.

Ajayi, S. Ibi

PD June 1997. **TI** An Analysis of External Debt and Capital Flight in the Severely Indebted Low Income Countries in Sub-Saharan Africa. **AA** University of Ibadan. **SR** International Monetary Fund Working Paper: WP/97/68; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 26. **PR** not available. **JE** B41, F32, F33, F34. **KW** Africa. Capital Flight. Debt. International Finance.

AB The general objective of this study is to analyze the external debt and debt burdens of the severely indebted sub-Saharan African countries, estimate the magnitude of capital flight from them, and relate the estimate of capital flight to some macroeconomic aggregates. The study also contains policy implications of international efforts to deal with the high levels of external debt in sub-Saharan Africa in conditions of extreme poverty, and stagnant and declining exports. It questions the theoretical foundation in which the external debt strategy has been based and offers solutions to the external debt problem.

Alesina, Alberto

PD May 1996. **TI** Budget Deficits and Budget Institutions. **AU** Alesina, Alberto; Perotti, Roberto. **AA** Alesina: International Monetary Fund and National Bureau of Economic Research. Perotti: Columbia University. **SR** National Bureau of Economic Research Working Paper: 5556; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** H61, H62. **KW** Budget Deficits. Budget Institutions. Budget Procedures.

AB By discussing the available theoretical and empirical literature, this paper argues that budget procedures and budget institutions do influence budget outcomes. Budget institutions include both procedural rules and balanced budget laws. We critically assess theoretical contributions in this area and suggest several open unresolved issues. We also examine the empirical evidence drawn from studies on samples of OECD countries, Latin American countries and U.S. states.

PD May 1996. **TI** Budget Institutions and Fiscal Performance in Latin America. **AU** Alesina, Alberto; Hausmann, Ricardo; Hommes, Rudolf; Stein, Ernesto. **AA** Alesina: Harvard University and National Bureau of Economic Research. Hausmann and Stein: Inter-American Development Bank. Hommes: Universidad de los Andes. **SR** National Bureau of Economic Research Working Paper: 5586; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website:

www.nber.org. PG 24. PR \$5.00. JE E62, H61. KW Fiscal Policy. Latin America. Budget Systems.

AB In this paper we collect detailed information on the budget institutions of Latin American countries. We classify these institutions on a "hierarchical"/"collegial" scale, as a function of their transparency and the existence of legislative constraints on the deficit. We then show that "hierarchical" and transparent procedures have been associated with more fiscal discipline in Latin America in the eighties and early nineties.

PD June 1996. **TI** The Costs and Benefits of Fiscal Rules: Evidence from U.S. States. **AU** Alesina, Alberto; Bayoumi, Tamim. **AA** Alesina: Harvard University and National Bureau of Economic Research. Bayoumi: International Monetary Fund. **SR** National Bureau of Economic Research Working Paper: 5614; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 9. PR \$5.00. JE E62, H72. KW Balanced Budget. Fiscal Policy. State-Level Policy. Output.

AB This paper shows that in American states balanced budget rules are effective in enforcing fiscal discipline but they have no costs in terms of increased output variability. More specifically, we show that tighter fiscal rules are associated with larger average surplus and lower cyclical variability of the budget balance. However, the lower flexibility of the budget balance does not affect state output variability.

Alexander-Cook, Kim

PD August 1995. **TI** Riding Free on the Signals of Others. **AU** Alexander-Cook, Kim; Bernhardt, Dan; Roberts, Joanne. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 927; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. PG 15. PR \$3.21 Canada; \$3.50 U.S. and Foreign. JE D82. KW Incomplete Information. Free Riding. Signaling.

AB This paper looks at the incentives to free-ride on the information signaling of others and shows how this can lead to delay in productive activity and to a cascade of activity once information is signaled. In the presence of increasing returns to scale to a profitable project, an initial pioneer may have to incur short-term losses to signal the opportunity to others. Agents may prefer to defer entry in the hope that others will incur those losses and thereby convey the information. Free-riding incentives can be so strong that profitable projects may not be undertaken. Free-riding is worsened when potential entrants must first acquire a costless signal about the project, and this information acquisition is observed: not acquiring the information commits an agent not to incur the entry costs.

Allain, Laurence

TI Compensation Structure and Product Market Competition. **AU** Abowd, John M.; Allain, Laurence.

Allen, Steven G.

PD April 1996. **TI** Technology and the Wage Structure. **AA** North Carolina State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5534; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 33. PR \$5.00. JE J24, J31, O33. KW Wage Structure. Technology. Wage

Differentials. Returns to Schooling. Research and Development.

AB This paper reports direct evidence on how recent changes in technology are related to changes in wage differentials by schooling, experience, and gender. Wage differentials by industry in the full-year 1979 and 1989 Current Population Surveys are related to R&D intensity, usage of high-tech capital, recentness of technology, growth in total factor productivity, and growth of the capital-labor ratio. Returns to schooling are larger in industries that are intensive in R&D and high-tech capital. Technology variables account for 30 percent of the increase in the wage gap between college and high school graduates.

Alonso-Gamo, Patricia

PD January 1997. **TI** Adjusting to New Realities: MENA, The Uruguay Round, and the EU-Mediterranean Initiative. **AU** Alonso-Gamo, Patricia; Fennell, Susan; Sakr, Khaled. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/05; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 45. PR not available. JE F10, F21, F41, O50. KW Middle East. North Africa. International Trade. Openness.

AB This paper addresses concerns that the Middle East and North Africa (MENA) region, with the exception of the GCC economies, has lagged behind in trade liberalization. This delay has adversely affected production efficiency and consumer welfare and could reduce the region's ability to attract foreign investment. Against this background, the paper examines the major challenges facing MENA if it is to benefit from the opportunities presented by the Uruguay Round and the European Union Mediterranean Initiative. It concludes with an overview of measures that MENA countries will need to implement to benefit from these trade-enhancing initiatives.

Alston, Lee J.

PD November 1995. **TI** The Determinants and Impact of Property Rights: Land Titles on the Brazilian Frontier. **AU** Alston, Lee J.; Libecap, Gary D.; Schneider, Robert. **AA** Alston: University of Illinois and National Bureau of Economic Research. Libecap: University of Arizona and National Bureau of Economic Research. Schneider: The World Bank. **SR** University of Arizona Economics Working Paper: 95/3; Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, University of Arizona, Tucson, AZ 85721-0108. PG 35. PR \$2.00 U.S. and Canada; \$3.00 Overseas by air. JE D23, O13, O18, Q11, Q15. KW Brazil. Property Rights. Land Values. Agricultural Investment.

AB Brazil is the country most often cited for deforestation and other alleged environmentally-damaging actions in the Amazon, and unclear property rights are suggested as a source of the problem. In this paper, the authors provide new empirical results regarding the demand and supply of title, its impact on land value, and its effects on agricultural investment on Brazilian frontiers. Their results underscore the robustness of the theoretical predictions about the role of property rights in influencing investment and raising land values. Additionally, this case study of Brazilian frontiers provides evidence regarding the political and economic processes that underlie the demand and supply of title. These empirical results provide insights into the contribution of property rights for economic behavior and the development of markets. This information

adds to the growing literature in the new institutional economics and to the literature on economic development.

Altonji, Joseph G.

PD April 1996. **TI** The Effects of Income and Wealth on Time and Money Transfers Between Parents and Children. **AU** Altonji, Joseph G.; Hayashi, Fumio; Kotlikoff, Laurence J. **AA** Altonji: Northwestern University and National Bureau of Economic Research. Hayashi: Columbia University and National Bureau of Economic Research. Kotlikoff: Boston University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5522; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** I31. **KW** Money Transfers. Time Transfers.

AB We use the 1988 PSID to study the effects of income and wealth on transfers of money and time between individuals and their parents as well as the effects of incomes of other relatives on these flows. We relate the relative incomes of parents and parents in-law to transfer amounts given and received by married couples. We also study how the relative incomes of divorced parents influence transfers. We find that money transfers tend to reduce inequality in household incomes and that time transfers are only weakly related to income differences. Richer siblings give more to parents and receive less. Among parents and parents in-law the richer set of parents is more likely to give money and less likely to receive money. The same is true of divorced parents. In contrast to the implications of simple exchange models of transfers, there is little evidence in the cross section or in the analysis using siblings that parental income or wealth raises time transfers from children or that time transfers are exchanged for money transfers. We discuss the implications of our results for alternative models of transfers.

Amir, Rabah

PD July 1996. **TI** Effects of One-Way Spillovers on Market Shares, Industry Price, Welfare, and R&D Cooperation. **AU** Amir, Rabah; Wooders, John. **AA** Amir: WZB. Wooders: University of Arizona. **SR** University of Arizona Economics Working Paper: 97/1; Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, University of Arizona, Tucson, AZ 85721-0108. **PG** 34. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** C72, D43, L13, O31. **KW** Research and Development. Cournot Duopoly. One-Way Spillovers. Endogenous Heterogeneity. Joint Ventures.

AB This paper shows that strategic behavior of firms facing Cournot competition under imperfectly appropriable R&D (with one-way spillovers) provides an explanation of intra-industry heterogeneity. With two a priori identical firms, an industry configuration endogenously emerges in which one firm (the innovator) reduces costs more than the other (the imitator). The authors show how R&D decisions and measures of firm heterogeneity depend on spillovers and on R&D costs. While a joint lab always improves on consumer welfare, it yields higher profits, cost reductions and social welfare only under extra assumptions beyond those required with multi-directional spillovers.

PD July 1996. **TI** One-Way Spillovers, Endogenous Innovator/Imitator Roles and Research Joint Ventures. **AU** Amir, Rabah; Wooders, John. **AA** Amir: WZB. Wooders: University of Arizona. **SR** University of Arizona

Economics Working Paper: 97/2; Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, University of Arizona, Tucson, AZ 85721-0108. **PG** 34. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** C72, D43, L13, O31. **KW** Oligopoly. Research and Development. One-Way Spillovers. Joint Ventures. Submodularity.

AB We consider a two-period duopoly characterized by a one-way spillover structure in process R&D and a very broad specification of product market competition. We show that a priori identical firms always engage in different levels of R&D, at equilibrium, thus giving rise to an innovator/imitator configuration and ending up with different sizes. We also provide a general analysis of the social benefits of, and firms' incentive for, forming research joint ventures. The key properties of the game are submodularity (R&D decisions are strategic substitutes) and lack of global concavity.

Anderlini, Luca

PD January 1997. **TI** Costly Coasian Contracts. **AU** Anderlini, Luca; Felli, Leonardo. **AA** Anderlini: University of Cambridge. Felli: London School of Economics. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9704; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 47. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** C78, D23, D60, D74, D82. **KW** Contract Costs. Contract. Incomplete Contract. Principal Agent.

AB The authors identify and investigate the basic "hold-up" problem which arises whenever each party to a contingent contract has to pay some ex ante cost for the contract to become feasible. They then proceed to show that, under plausible circumstances, a "contractual solution" to this hold-up problem is not available. This results since a contractual solution to the hold-up problem typically entails writing a "contract over a contract" which generates a fresh set of ex ante costs, and hence is associated with a new hold-up problem. The paper concludes by investigating two applications of the results to a static and to a dynamic principal-agent model.

Anderson, Kym

PD April 1997. **TI** Economic Growth and Policy Reform in the APEC Region: Trade and Welfare Implications by 2005. **AU** Anderson, Kym; Martin, Will; Hertel, Tom; Dimaranan, Betina. **AA** Anderson: University of Adelaide. Martin: World Bank. Hertel and Dimaranan: Purdue University. **SR** Centre for Economic Policy Research Discussion Paper: 1605; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 18. **PR** 4 pounds or \$8.00. **JE** F13, F17, O53, Q17, R13. **KW** Asia-Pacific. Uruguay Round. Economic Projections.

AB This paper examines the impacts of key trade reforms likely to affect the APEC region over the next decade. It does so by taking an economy-wide perspective using projections to the year 2005, based on the global CGE model known as GTAP. The paper begins by showing that the empirical impact of implementing the Uruguay Round depends significantly on how China and Taiwan are treated. It then explores the market implications of increased economic growth in China, as well as several policy shocks. It is shown that increased industrial growth in China -- due to China integrating more into the

global economy -- would be beneficial to the world, since it would boost industrialization in other Asian countries. Failure to honor Uruguay Round obligations to open textile and clothing markets in OECD countries, on the other hand, is shown to reduce East Asia's industrialization and thereby slow the growth in this region's net imports. Further MFN trade liberalization by APEC members, however, could add substantially to the growth and structural changes expected in the region and beyond over the next decade. The latter benefits are shown though to depend heavily on the inclusion of agriculture in the APEC reform.

Andrews, Rick L.

TI A Qualitative Response Model of Interest Rate Regimes.
AU Iyer, Sridhar; Andrews, Rick L.

Antonio Ricci, Luca

PD June 1997. **TI** Exchange Rate Regimes and Location.
AA International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/69; International Monetary Fund, 700 19th Street, Washington, DC 20431.
PG 28. **PR** not available. **JE** F10, F31, F33, L16, R12.
KW Exchange Rates. Firm Location. Industrial Specialization. Currency Area.

AB This paper investigates the effects of fixed versus flexible exchange rates on firms' location choices and on countries' specialization patterns. In a two-country, two-differentiated-goods monetary model, demand, supply, and monetary (as well as exchange rate) shocks arise after wages are set and prices are optimally chosen. The paper finds that countries are more specialized under flexible than fixed rates, and that the pattern of specialization is not uniquely defined by trade models but depends also on the exchange rate regime. The adoption of fixed exchange rates endogenously increases the desirability of this currency area by reducing the shock asymmetry. These results also shed light on the effects of exchange rate variability on trade.

Ariga, Kenn

PD April 1997. **TI** Fast Track: Is it in the Genes? The Promotion Policy of a Large Japanese Firm. **AU** Ariga, Kenn; Brunello, Giorgio; Ohkusa, Yasushi. **AA** Ariga: Kyoto University. Brunello: Universita Degli Studi di Udine. Ohkusa: Osaka City University. **SR** Centre for Economic Policy Research Discussion Paper: 1622; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 28. **PR** 4 pounds or \$8.00. **JE** J40, L20. **KW** Internal Labor Market. Promotion Policy. Japanese Firms.

AB This paper studies the promotion policy of a large, hi-tech manufacturing Japanese firm. We find that the company has multiple ports of entry and hires a significant number of employees with previous job experience. In addition, cohort-peer differentiation in promotion starts much earlier than predicted by the common view, and there are clear signs of fast-track effects, so that individuals promoted faster earlier are more likely to be promoted faster later on. Fast-track effects are not in the genes, because they survive even after controlling for time-invariant individual effects, such as innate individual ability. The last result is difficult to justify using a pure learning model, where ability is time invariant, so that a richer learning model, incorporating, say, human capital considerations, is clearly required.

Artis, Michael J.

PD March 1997. **TI** Volatility Clustering and Volatility Transmission: A Non-Parametric View of ERM Exchange Rates. **AU** Artis, Michael J.; Zhang, Wenda. **AA** Artis: European University Institute. Zhang: Manchester Metropolitan University. **SR** Centre for Economic Policy Research Discussion Paper: 1594; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 40. **PR** 4 pounds or \$8.00. **JE** C14, F31, G12. **KW** Exchange Rates. Volatility Clustering. Volatility Transmission. ERM.

AB This paper considers the evidence for volatility clustering and transmission in six bilateral Deutsche mark ERM exchange rates. Data on daily exchange rate changes are described by a mixture of two normal distributions. One of these contains observations of volatile exchange rate changes while the other pertains to tranquil periods. Using the information given by the two distributions, each observation is classified to one or other category. The phenomenon of volatility clustering in a given bilateral exchange rate series is then studied by means of a non-parametric test, while volatility transmission across exchange rates is studied by means of non-parametric tests for independence.

Arulampalam, Wiji

TI Modelling Work-Related Training and Training Effects Using Count Data Techniques. **AU** Booth, Alison L.; Arulampalam, Wiji; Elias, Peter.

Attiyeh, Greg

PD January 1996. **TI** Experiments with the Pivot Process for Providing Public Goods. **AU** Attiyeh, Greg; Franciosi, Robert; Isaac, Mark R. **AA** Attiyeh: AT&T. Franciosi: U.S. House of Representatives. Isaac: University of Arizona. **SR** University of Arizona Economics Working Paper: 96/1; Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, University of Arizona, Tucson, AZ 85721-0108. **PG** 25. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** D12, D82, H41. **KW** Incentive Compatibility. Value Revelation. Public Goods. Pivot Mechanism.

AB Although interest in dominant strategy public goods mechanisms has faded since the 1970's, their demand revealing properties continue to suggest some potential for issues involving valuation of public goods. However, there has been very little direct empirical evidence of their efficacy. We choose to concentrate on a simple, direct laboratory test of the "pivot" version of the process. The results did not support a finding of successful value revelation. The results raise broader issues as to why individuals do or do not play dominant strategies in this and other contexts.

Auld, M. Christopher

PD October 1996. **TI** Choices, Beliefs and Infections Disease Dynamics. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 938; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 28. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** D81, I10. **KW** Epidemiology. Aids. Uncertainty. Behavioral Response. Infectious Disease.

AB This paper develops a dynamic model of behavioral response to the risk of infectious disease. People respond to

increased risk of infection by either making marginal adjustments in risky behavior or by moving to a corner solution where perceived risk is zero. Individuals most prone to high-risk activity will tend to reduce activity less than those prone to low-risk activity. Very high-risk people may exhibit "fatalism" and increase risky behavior as the risk of becoming infected rises. Beliefs about the future course of the epidemic affect current behavior even when utility is additively separable: pessimistic beliefs induce more risky behavior. Simulations contrast the disease dynamics generated under these behaviors with those of standard epidemiological models and examine policy issues.

Aziz, Jahangir

PD February 1997. **TI** Cyclical Effects of the Composition of Government Purchases. **AU** Aziz, Jahangir; Leruth, Luc. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/19; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 32. **PR** not available. **JE** D43, D58, E32, H50, L13. **KW** General Equilibrium. Business Cycles. Imperfect Markets.

AB This paper constructs a general equilibrium model with monopolistically competitive firms and endogenous markups where government spending consists of both consumption and investment goods. It is shown that when markups are countercyclical, increases in the share of investment goods in aggregate government expenditure entail a trade-off between greater long-run efficiency and higher short-run volatility. Estimates based on the model, calibrated to the postwar U.S. economy, show that the effects on output, employment, and welfare can be significant.

Bacchetta, Philippe

PD January 1997. **TI** Trade in Nominal Assets and Net International Capital Flows. **AU** Bacchetta, Philippe; van Wincoop, Eric. **AA** Bacchetta: Studienzentrum Gerzensee. van Wincoop: Federal Reserve Bank of New York. **SR** Centre for Economic Policy Research Discussion Paper: 1569; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 28. **PR** 4 pounds or \$8.00. **JE** F32, F41. **KW** Exchange Rate Uncertainty. Nominal Risk. Capital Flows.

AB Nominal assets play a major role in international financial markets, while trade in indexed bonds is not empirically relevant. As a result, agents are generally exposed to both price and exchange rate uncertainty. Nonetheless, previous research on net capital flows has assumed the presence of a risk-free vehicle to intertemporal asset trade. In this paper, we present a general equilibrium intertemporal model with trade limited to nominal bonds and equity. We find that the absence of a risk-free bond generally dampens net capital flows, thus making economies effectively more closed.

Baer, Katherine

TI Designing a Tax Administration Reform Strategy: Experiences and Guidelines. **AU** Silvani, Carlos; Baer, Katherine.

Bagwell, Kyle

PD March 1996. **TI** Reciprocal Trade Liberalization. **AU** Bagwell, Kyle; Staiger, Robert W. **AA** Bagwell:

Northwestern University. Staiger: University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5488; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 43. **PR** \$5.00. **JE** F02, F11, F13. **KW** Export Subsidies. Trade Liberalization. Reciprocal Trade. Trade Agreements.

AB Why have governments found reciprocal trade agreements such as GATT to be a more effective means of facilitating trade liberalization than unilateral initiatives? We provide in this paper an analytic framework for the study of reciprocal trade agreements. We use this framework to establish three main results. First, we argue that political-economy factors are important for explaining the range of trade policies observed, but that these factors cannot explain why governments seek reciprocal trade agreements as an institutional form for implementing their preferred policies. Rather, whether or not governments are politically motivated, Johnson (1953-54) was right: The central purpose of a reciprocal trade agreement is to eliminate the terms-of-trade driven policies that arise in the absence of such an agreement. Second, we establish an economic interpretation of the principles of reciprocity and nondiscrimination that represent the foundation of postwar reciprocal trade agreements. Finally, we offer new insights regarding the treatment of export subsidies in reciprocal trade agreements.

PD May 1996. **TI** Strategic Export Subsidies and Reciprocal Trade Agreements: The Natural Monopoly Case. **AU** Bagwell, Kyle; Staiger, Robert W. **AA** Bagwell: Northwestern University. Staiger: University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5574; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** F12, F13. **KW** Export Subsidies. Natural Monopoly.

AB Why do governments seek restrictions on the use of export subsidies through reciprocal trade agreements such as GATT? With existing arguments, it is possible to understand GATT's restrictions on export subsidies as representing an inefficient victory of the interests of exporting governments over the interests of importing governments. However, to our knowledge, there does not exist a formal theoretical treatment that provides circumstances under which GATT's restrictions on export subsidies can be given a world-wide efficiency rationale. In this paper, we offer one such treatment in the context of a natural monopoly market. We emphasize that subsidy competition between governments can serve to coordinate the entry decisions of firms, finding that consumers in the importing countries may suffer if the coordination afforded exporters by government subsidy programs does more to prevent entry than to promote it. In such circumstances, we show that the existence of export subsidy programs can lead to inefficiencies, and importing countries and the world as a whole can be better off when such programs are banned.

Baily, Martin Neil

PD March 1996. **TI** Labor Productivity: Structural Change and Cyclical Dynamics. **AU** Baily, Martin Neil; Bartelsman, Eric J.; Haltiwanger, John. **AA** Baily and Haltiwanger: University of Maryland and National Bureau of Economic Research. Bartelsman: Federal Reserve Board. **SR** National Bureau of Economic Research Working Paper:

5503; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 18. PR \$5.00. JE E32, J24. KW Labor Productivity. Downsizing Penalty. Procyclical Productivity. Adjustment Costs.

AB A longstanding puzzle of empirical economics is that average labor productivity declines during recessions and increases during booms. This paper provides a framework to assess the empirical importance of competing hypotheses for explaining the observed procyclicality. For each competing hypothesis we derive the implications for cyclical productivity conditional on expectations of future demand and supply conditions. The novelty of the paper is that we exploit the tremendous heterogeneity in long-run structural changes across individual plants to identify the short-run sources of procyclical productivity. Our findings favor an adjustment cost model which involves a productivity penalty for downsizing as the largest source of procyclical labor productivity.

Baland, Jean-Marie

PD August 1996. **TI** Investment Coordination and Demand Complementarities. **AU** Baland, Jean-Marie; Francois, Patrick. **AA** Baland: University of Namur. Francois: Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 933; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. PG 20. PR \$3.21 Canada; \$3.50 U.S. and Foreign. JE D43, L13, L16, O14, O33. KW Investment Coordination. Monopolistic Competition. Demand Complementarity. Hicksian Demand.

AB This paper analyzes the possibility of investment coordination leading to outcomes which dominate non-investment equilibria in the presence of monopolistic competition. We establish when complementarity leads to investment coordination failures and explore the welfare implications of coordinated investment. Our main results caution against demand complementarities as a motive for investment coordination. We find that: 1. generally, a strict notion of complementarity (Hicks) is necessary for the existence of an investment coordination problem and 2. that when the problem does exist, coordination often lowers social welfare.

Baldwin, Richard E.

PD April 1996. **TI** Trade Liberalization and Endogenous Growth: A q-Theory Approach. **AU** Baldwin, Richard E.; Forslid, Rikard. **AA** Baldwin: University of Geneva and National Bureau of Economic Research. Forslid: University of Lund. **SR** National Bureau of Economic Research Working Paper: 5549; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 18. PR \$5.00. JE F12, F13, O41. KW Endogenous Growth. Q-Theory. Tobin's q.

AB This paper has two purposes. It introduces a direct approach to policy analysis in endogenous growth models -- the q-theory approach -- and uses this to illustrate several new openness-and-growth links that appear when we enrich the economic content of the early trade and growth models. The approach -- inspired by Tobin's q -- is merely a change of state variables and re-interpretation of steady-state conditions. The main difference is its focus on investment, which is after all, the heart of growth models. The approach's simplicity permits us to

complicate the early models in interesting directions and to explicitly include trade barriers. The latter allows study of incremental policy reform rather than mere shifts from autarky to free trade (or small deviations from free trade) as in early literature.

PD May 1996. **TI** Trade-Induced Investment-Led Growth. **AU** Baldwin, Richard E.; Seghezza, Elena. **AA** Baldwin: University of Geneva and National Bureau of Economic Research. Seghezza: University of Geneva. **SR** National Bureau of Economic Research Working Paper: 5582; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 17. PR \$5.00. JE E13, F11, F21, F43. KW Neoclassical Growth. Openness. Investment. Trade. International Economics.

AB This paper presents five theoretical openness-and-growth links that can account for trade-induced investment-led growth. The links are all demonstrated with neoclassical growth models developed in the context of trade models that allow for imperfect competition and scale economies. This sort of old-growth-theory-in-a-new-trade-model has not been thoroughly explored in the literature since the profession skipped from old-growth-old-trade models straight to new-growth-new-trade models. Nevertheless, such models are necessary to explain several key aspects of the econometric evidence on trade and growth. For example, cross-country data suggests that openness influences growth only via its effect on investment, and suggests that openness promotes investment in all countries (contrary to prediction of the old-growth-old-trade models).

PD March 1997. **TI** The Causes of Regionalism. **AA** Baldwin: Graduate Institute of International Studies. **SR** Centre for Economic Policy Research Discussion Paper: 1599; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 48. PR 4 pounds or \$8.00. JE F13, F15. KW Regionalism. Preferential Trade. World Trade.

AB The traditional explanation of resurgence regionalism nations rests on two pillars. Regionalism is: (i) due to frustration with the WTO process (thought to be too cumbersome for today's trade issues); and (ii) due to the United States' conversion from devoted multilateralist to ardent regionalist. This paper argues that the traditional explanation is inconsistent with the facts of North American and European regionalism. It also presents an alternative explanation based on a domino theory of regionalism. Namely, idiosyncratic shocks that deepen or widen regional integration trigger a multiplier or domino effect producing membership requests from countries that were previously happy to be non-members.

PD March 1997. **TI** Preferential Trade Liberalization in the North Atlantic. **AU** Baldwin, Richard E.; Francois, Joseph F. **AA** Baldwin: Graduate Institute of International Studies. Francois: Erasmus University Rotterdam. **SR** Centre for Economic Policy Research Discussion Paper: 1611; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 14. PR 4 pounds or \$8.00. JE F13, F47. KW Free Trade. Preferential Trade. Regionalism. Transatlantic Trade.

AB This study provides a quantitative assessment of the implications of preferential trade liberalization by the North Atlantic economies. Emphasis is placed on the pattern of production and trade in North America and Western Europe,

the pattern of import protection, and the likely trade and income effects of trade liberalization. The potential benefits of preferential trade liberalization are also compared with the potential benefits of post-Uruguay Round most-favored nation-based reductions in trade barriers. The numerical assessment highlights the impact both on the North Atlantic economies themselves, and on their important regional trading partners.

Baldwin, Robert E.

PD March 1996. **TI** Measuring U.S. International Goods and Services Transactions. **AU** Baldwin, Robert E.; Kimura, Fukunari. **AA** Baldwin: University of Wisconsin-Madison and National Bureau of Economic Research. Kimura: Keio University. **SR** National Bureau of Economic Research Working Paper: 5516; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** C80, F10. **KW** International Transactions. Cross-border Activities. Measuring Transactions.

AB In order to better capture the close relationship between firms' cross-border trading activities and the sales and purchasing activities of their foreign affiliates, this paper proposes supplementary accounting formats that classify cross-border and foreign affiliate activities on an ownership basis, in contrast to the residency approach followed in the balance-of-payments accounts. One format combines net cross-border sales by Americans to foreigners, net sales by foreign affiliates of U.S. firms to foreigners, and net sales of U.S. firms to U.S. affiliates of foreign firms to yield a figure that indicates net sales by Americans to foreigners. Another accounting format measures the value-added embodied in cross-border and foreign affiliate activities on an ownership basis. U.S. cross-border and foreign affiliate activities based on these two approaches are presented and analyzed for the period, 1987-1992. In addition, data by industry are presented in these formats.

PD March 1997. **TI** Shifts in US Relative Wages: The Role of Trade, Technology and Factor Endowments. **AU** Baldwin, Robert E.; Cain, Glen G. **AA** University of Wisconsin-Madison. **SR** Centre for Economic Policy Research Discussion Paper: 1596; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 80. **PR** 4 pounds or \$8.00. **JE** F10, J31. **KW** Trade. Wages. Technology. Factor Supplies.

AB This paper investigates three hypotheses to account for the observed shifts in U.S. relative wages of less educated workers compared to more educated workers from 1967-92: (i) increased import competition; (ii) changes in the relative supplies of labor of different educational levels; and (iii) changes in technology. Our analysis relies on a basic relationship of the standard general equilibrium trade model, that relates changes in product prices to factor price changes and factor shares, together with information about changes in the composition of output, trade, within-industry factor use and factor supplies. We find support for the hypothesis that the relative increase in the supply of well-educated labor was the dominant economic force that narrowed the wage gap in the late 1960's and early 1970's. Our results also indicate that technical progress rather than increased import competition was the dominant force in the widening of the wage gap among the major education groups after 1980.

Ball, Laurence

PD March 1996. **TI** Disinflation and the Nairu. **AA** Johns Hopkins University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5520; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** E24, E31. **KW** NAIRU. Disinflation. Hysteresis. Unemployment Benefits.

AB This paper asks why the NAIRU rose in most OECD countries in the 1980's. I find that a central case was the tight monetary policy used to reduce inflation. The evidence comes from a cross-country comparison: countries with larger decreases in inflation and longer disinflationary periods have larger rises in the NAIRU. Imperfections in the labor market have little direct relation to changes in the NAIRU, but long-term unemployment benefits magnify the effects of disinflation. These results support "hysteresis" theories of unemployment.

Banschbach, Chris

PD December 1996. **TI** Effective Management: Interviews With Firms Having Traditional, Decentralized and Participatory Management, and a Proposal: Integrated Management. **AU** Banschbach, Chris; Koford, Kenneth. **AA** Banschbach: Andersen Consulting. Koford: University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 97/01; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 30. **PR** not available. **JE** J24, J50, M10. **KW** Survey. Business Structure. Labor Productivity. Management Types.

AB We conducted interviews with executives, middle managers and workers at firms with three types of management: command and control hierarchy, decentralized, and participatory management. The interviews indicate that worker productivity can be increased by effective worker empowerment carried out as a system, combining financial incentives and the daily task environment with an empowered working environment. In contrast, decentralization or worker empowerment without related elements is not likely to increase productivity.

Barro, Robert J.

PD March 1996. **TI** Reflections on Ricardian Equivalence. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5502; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** \$5.00. **JE** E21, E62, H62. **KW** Ricardian Equivalence. Public Debt. Tax Smoothing.

AB The Ricardian equivalence proposition for public debt in my 1974 JPE paper is related to the discussions in Ricardo's Funding System, Smith's Wealth of Nations, and a number of treatments in macroeconomics from the 1950's to the 1970's. Useful extensions of the basic invariance proposition involve tax smoothing (in the context of distorting taxation) and the determinants of the maturity and other characteristics of the debt structure (in an environment of uncertainty).

Barros, Pedro Pito

PD March 1997. **TI** On the Effects of Anti-Dumping Legislation. **AU** Barros, Pedro Pito; Martinez-Giralt, Xavier.

AA Barros: Universidade Nova de Lisboa. Martinez-Giral: Universitat Autònoma de Barcelona. **SR** Centre for Economic Policy Research Discussion Paper: 1590; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 28. **PR** 4 pounds or \$8.00. **JE** F12, F13, K29, L13. **KW** Antidumping Legislation. Market Segmentation. One-Way Trade.

AB We show that the nature and extent of trade is significantly affected by the pricing policy that firms are allowed to employ. A switch from discriminatory to non-discriminatory pricing (e.g. strict anti-dumping laws) leads to a switch from two-way trade to one-way trade. It is far from true that consumers will necessarily be favored by such a policy switch. The distribution of gains is also significantly affected by relative country size.

Bartelsman, Eric J.

TI Labor Productivity: Structural Change and Cyclical Dynamics. **AU** Baily, Martin Neil; Bartelsman, Eric J.; Haltiwanger, John.

Baumgartner, Josef

PD April 1997. **TI** Monetary Policy and Leading Indicators of Inflation in Sweden. **AU** Baumgartner, Josef; Ramaswamy, Ramana; Zettergren, Goran. **AA** Baumgartner: Austrian Institute of Economic Research. Ramaswamy: International Monetary Fund. Zettergren: Central Bank of Sweden. **SR** International Monetary Fund Working Paper: WP/97/34; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 16. **PR** not available. **JE** C50, D84, E31, E51, E52. **KW** Sweden. Inflation. Leading Indicators. Monetary Policy.

AB This paper derives a set of leading indicators of inflation for Sweden. It also discusses methodological and policy issues pertaining to the estimation of these indicators. The main findings are: (1) narrow money is the most powerful leading inflation indicator; (2) broad money and inflation expectations have significant predictive information on inflation; (3) the output gap, interest rates, and the credit aggregate have some predictive information on inflation, and this information is confined to a shorter time horizon than either the monetary aggregates or inflation expectations; and (4) implied forward rates have only weak predictive information on inflation.

Bayoumi, Tamim

TI Getting Pegged: Comparing the 1879 and 1925 Gold Resumptions. **AU** Bordo, Michael D.; Bayoumi, Tamim.

TI The Costs and Benefits of Fiscal Rules: Evidence from U.S. States. **AU** Alesina, Alberto; Bayoumi, Tamim.

PD April 1997. **TI** A Provincial View of Economic Integration. **AU** Bayoumi, Tamim; Klein, Michael. **AA** Bayoumi: International Monetary Fund. Klein: Fletcher School of Law and Diplomacy. **SR** International Monetary Fund Working Paper: WP/97/41; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 17. **PR** not available. **JE** F15, F36, R13. **KW** Consumption Smoothing. Economic Integration. Canada. International Trade.

AB This paper develops a method of testing levels of economic integration based upon consumption smoothing, and tests it using data on trade balances across Canadian provinces.

The results indicate that the provinces are highly integrated within Canada, but integration between Canada and the rest of the world is partial. Provincial trade balances respond only about half as much to events in the rest of the world as they do to events within Canada. In short, national borders appear to matter for intertemporal trade.

PD May 1997. **TI** Explaining Consumption: A Simple Test of Alternative Hypotheses. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/56; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 26. **PR** not available. **JE** D12, D81, E21. **KW** Consumption. Risk Sharing. Liquidity Constraints. Canada. Consumer Behavior.

AB A method of testing the relative importance for consumption of risk-sharing behavior and changes in current income is proposed and estimated using data across Canadian provinces. The focus of the estimation is less on whether or not the risk-sharing model can be rejected than on how much each of these hypotheses can contribute to explaining overall variation in consumption. Both types of behavior are found to be statistically significant, but the risk-sharing model is found to explain considerably more of the growth in consumption than do changes in income.

Bebchuk, Lucian Arye

PD May 1996. **TI** Corporate Ownership Structures: Private Versus Social Optimality. **AU** Bebchuk, Lucian Arye; Zingales, Luigi. **AA** Bebchuk: Harvard University and National Bureau of Economic Research. Zingales: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5584; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** D23, G32, L22. **KW** Social Welfare. Public Offering. Finance. International Finance. Stocks.

AB This paper analyzes the inefficiencies that might arise in the ownership structure chosen at the initial public offering stage. We show that, contrary to what is commonly believed, the desire of initial owners to maximize their proceeds leads them to choices that, although privately optimal, may be socially inefficient. This distortion tends to be in the direction of excessive incidence of controlling shareholder structures and excessive divestment of cash flow rights. Our analysis has far-reaching policy implications for dual class stock, stock pyramiding, sale of control rules, and public offerings of minority shares. Among its positive implications, our analysis suggests reasons for the substantial differences in the incidence of control blocks across different countries.

Bedard, Kelly

PD May 1997. **TI** Standard Mortality Ratios in Capitation Funding Models: Empirical Issues From Canadian Data. **AU** Bedard, Kelly; Dorland, John; Gregory, Allan W.; Rosenberg, Mark. **AA** Bedard: McMaster University. Dorland, Gregory, and Rosenberg: Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 948; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 16. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** H51, I12, I18. **KW** Capitation Funding. Mortality Ratios. Relative Need. Canada.

AB Needs based capitation models have been suggested as an alternative to funding methods based on historical utilization patterns. The standardized mortality ratio (SMR) applied in conjunction with an age/gender adjustment is the most widely adopted measure of relative need. This paper addresses a number of important index construction issues using Canadian data. These include the influence exerted by the reference population (national versus provincial), the age structure (excluding people over 64 versus 74), the optimal period over which to average the SMR in order to smooth meaningless fluctuations, and the correspondence between SMR's, standard socio-economic indicators (i.e. unemployment, education, and income), health care "need", and expenditures.

Beetsma, Roel M. W. J.

PD January 1997. **TI** Inflation Targets and Contracts with Uncertain Central Banker Preferences. **AU** Beetsma, Roel M. W. J.; Jensen, Henrik. **AA** Beetsma: University of Limburg. Jensen: University of Copenhagen. **SR** Centre for Economic Policy Research Discussion Paper: 1562; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 32. **PR** 4 pounds or \$8.00. **JE** E42, E52, E58. **KW** Monetary Delegation. Inflation Contracts. Inflation Targets. Uncertainty. **AB** Within a standard model of monetary delegation we show that the optimal linear inflation contract performs strictly better than the optimal inflation target when there is uncertainty about the central banker's preferences. The optimal combination of a contract and a target performs best, and eliminates the inflation bias and any variability not associated with supply shocks. Variability due to shocks is enhanced by uncertain central banker preferences however, which suggests the need for alternative incentive mechanisms. Quadratic contracts are shown to partly overcome the problem. Still, the advantages of delegation may be dominated by the "excess variability" due to shocks.

Begg, David

PD August 1997. **TI** The Design of EMU. **AA** Birkbeck College and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/99; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** E31, E32, E52, E58, F33. **KW** European Union. Credibility. Asymmetric Shocks. Central Banks. Labor Markets. **AB** Pursuit of price stability may, but need not, exacerbate output fluctuations. This paper discusses the monetary strategy of the European Central Bank, the intermediate targets that this should entail, and implications for accountability, transparency, and reputation. Country-specific shocks will remain but output correlation may not reflect the old pattern of core and peripheral countries. The Stability Pact will force some countries to switch off their automatic stabilizers; others, with fewer fiscal problems, can retain them. Output correlations in EMU may reflect a fiscal core and fiscal periphery. Additional labor market flexibility remains the best solution.

Beichman, Arnold

PD August 1994. **TI** In a Smoke-Filled Room...Stalin's Defeat in 1944: A Look Back at Henry Wallace's Ouster as Vice-President. **AA** Stanford University. **SR** Stanford Hoover Institution International Studies Working Paper: 94/10; The Hoover Institution, Stanford University, Stanford, CA

94305. **PG** 15. **PR** no charge. **JE** B24, N00, P20. **KW** Democratic Party. Communism. Wallace. Roosevelt.

AB Fifty years ago, the Democratic Party presidential convention nominated President Roosevelt for a fourth term. Perhaps an even more important event at that same convention and one which ultimately had as great an effect on world history as the Normandy D-Day invasion two months earlier, was the rejection by FDR and a cabal of machine politicians of Henry A. Wallace for a second term as vice-president. The nomination, of course, went instead to Harry S. Truman. Wallace was working closely with the U.S. Communist Party and his re-election as vice-president would have been a major triumph for Stalin and his imperial ambitions.

Bell, David N. F.

TI Multiple Job Holding as a 'Hedge' Against Unemployment. **AU** Wright, Robert E.; Bell, David N. F.; Hart, Robert A.

Ben-David, Dan

PD February 1997. **TI** Structural Change and International Trade. **AU** Ben-David, Dan; Papell, David H. **AA** Ben-David: Tel Aviv University. Papell: University of Houston. **SR** Centre for Economic Policy Research Discussion Paper: 1568; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 20. **PR** 4 pounds or \$8.00. **JE** C22, F10. **KW** International Trade. Structural Breaks.

AB This paper examines trends in trade behavior of 48 countries since the Second World War. In light of the substantial movement towards removal of trade impediments world-wide during the post-war period, this paper attempts to determine if, and when, countries experienced significant changes in the paths of their export-GDP and import-GDP ratios. We find that: (1) the time-paths of the trade ratios in most countries exhibit a structural break during the post-war period; (2) the extent of trade following the breaks exceeded the pre-break trade levels for the majority of countries; (3) the relationship between the timing of the break for imports and the timing of the break for exports is not particularly strong; and (4) there is little relation between the extent of the post-break to pre-break changes in imports and the post-break to pre-break changes in exports for most countries.

Benabou, Roland

PD May 1996. **TI** Unequal Societies. **AA** New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5583; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** F01, H21, H23, H50, O40. **KW** Redistribution. Inequality. Growth. Welfare. Political Economy.

AB This paper shows how countries with similar technologies and preferences, as well as equally democratic political systems, can sustain very different average and marginal tax rates. Similarly, it provides an explanation for the striking difference between the U.S. and European systems of education finance or health insurance. With imperfect credit and insurance markets some redistributive policies can have a positive effect on aggregate output, growth, or more generally ex-ante welfare. Aggregate efficiency gains imply very different political economy consequences from those of standard

models: the extent of political support for such redistributive policies decreases with the degree of inequality, at least over some range. This can generate a negative correlation between inequality and growth, as found in the data, without the usual feature that transfers increase with inequality, which is not supported empirically.

Bergin, James

PD September 1996. **TI** Industry Dynamics Over the Business Cycle. **AU** Bergin, James; Bernhardt, Dan. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 935; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. **Website:** qed.econ.queensu.ca/pub/paper. **PG** 51. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** E32, L16. **KW** Stochastic Heterogeneity. Aggregate Shocks. Social Planner. Exit. Thin Markets.

AB The authors develop a theoretical model of the dynamics of an industry over the business cycle. In the economy, both aggregate demand and the productivity of a firm's technology evolve stochastically. Each period, firms must choose whether to produce or to exit and attempt to sell off their resources to an entrant, so there is a non-trivial opportunity cost of production. The authors characterize the intertemporal evolution of the distribution of firms, where firms are distinguished by their capital in place and the productivity of their technology. They also characterize exit rates by age, size and productivity. A useful social planner's characterization of the competitive equilibrium is provided. Predictions of the authors theoretical model are broadly consistent with observed cyclical patterns.

Bergstrom, Ted

PD April 1995. **TI** Economics in a Family Way. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/07; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 41. **PR** \$4.00; payable to the Department of Economics. **JE** C72, C78, D11, J10. **KW** Family. Bargaining. Spousal Bargaining. Marriage Markets. Evolution.

AB The current paper refers frequently to work in other disciplines, particularly anthropology and biology. The first section presents an evolutionary theory of interpersonal sympathy among family members. The author discusses the genetic theory of kin selection and its implications for human preferences and relates these ideas to theories of the cultural evolution of preferences. The next section takes an evolutionary viewpoint in exploring the demographic transition and the question of intergenerational flows of wealth. The third section discusses non-monogamous family structures in our own culture and in other cultures. The final section draws on a more traditionally economic source. It outlines an approach to bargaining theory within the family based on recent discoveries in non-cooperative game theory and discusses ways of integrating the theory of spousal bargaining with the theory of marriage markets.

PD August 1995. **TI** Evolution of Behavior in Family Games. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/08.; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 20. **PR** \$4.00; payable to the Department of

Economics. **JE** A12, C72, C79. **KW** Nash Equilibrium. Game Theory. Evolution. Genetic Models.

AB In this paper, the author explores the relation between stable monomorphic populations of sexual diploids and Nash Equilibrium for games in which the payoff functions are respectively, inclusive fitness and personal fitness, where one's inclusive fitness counts the help that one gives to relatives and one's personal fitness counts the help that one receives from relatives. The author uses explicit genetic models of a diploid species. The author considers necessary conditions and sufficient conditions for a monomorphic population to be resistant against invasion by dominant mutant genes.

Berkowitz, Jeremy

PD January 1997. **TI** Long-Horizon Exchange Rate Predictability? **AU** Berkowitz, Jeremy; Giorgianni, Lorenzo. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/06; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 17. **PR** not available. **JE** C15, C32, F31. **KW** Exchange Rates. Foreign Exchange. Time Series. Error Correction. Simulation.

AB Several authors have recently investigated the predictability of exchange rates by fitting a sequence of long-horizon error-correction regressions. By considering the implied vector error-correction model, we show that little is to be gained from estimating such regressions for horizons greater than one time period. We also show that in small to medium samples the long-horizon procedure gives rise to spurious evidence of predictive power. A simulation study demonstrates that even when using this technique on two independent series, estimates, diagnostic statistics and graphical evidence incorrectly suggest a high degree of predictability of the dependent variable.

Bernhardt, Dan

TI Scab Labor. **AU** Spicer, John; Bernhardt, Dan.

TI Roller Coasting Up and Down the Demand Curve of a Durable Goods Monopolist. **AU** Spicer, John; Bernhardt, Dan.

TI Riding Free on the Signals of Others. **AU** Alexander-Cook, Kim; Bernhardt, Dan; Roberts, Joanne.

TI Industry Dynamics Over the Business Cycle. **AU** Bergin, James; Bernhardt, Dan.

Berry, Steven

PD April 1996. **TI** Free Entry and Social Inefficiency in Radio Broadcasting. **AU** Berry, Steven; Waldfogel, Joel. **AA** Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5528; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 25. **PR** \$5.00. **JE** D21, L11, L82. **KW** Free Entry. Radio Broadcasting. Social Inefficiency.

AB In theory, free entry can lead to social inefficiency. When new products are substitutes for existing products, the business stolen from incumbents places a wedge between private and social benefits of entry. The business stealing effect can be offset if entry reduces prices or increases available product variety. Our study of the radio industry provides one of the first empirical attempts to quantify the inefficiency associated with free entry. Using data on advertising prices, number of stations

and radio listening in 135 U.S. metropolitan markets, we estimate how listening and revenue vary with the number of stations. Using a free-entry assumption, we infer the distribution of station costs, which are fixed with respect to listening. We then use our estimates of revenue and fixed costs to calculate the welfare of market participants (excluding listeners) and the number of stations under free entry and social optimality. Relative to the social optimum, the welfare loss of free entry is 40 percent of industry revenue. However, we calculate that the free entry equilibrium would be optimal if the marginal value of programming to listeners were over three times the value of marginal listeners to advertisers, who pay 4.5 cents per hour.

PD May 1996. **TI** Airline Hubs: Costs, Markups and the Implications of Customer Heterogeneity. **AU** Berry, Steven; Carnall, Michael; Spiller, Pablo T. **AA** Berry: Yale University and National Bureau of Economic Research. Carnall: University of Illinois. Spiller: University of California, Berkeley. **SR** National Bureau of Economic Research Working Paper: 5561; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** L11, L93, R32. **KW** Airline Hubs. Customer Heterogeneity. Product Differentiation.

AB This paper estimates a model of airline competition that captures the two major features of the industry: product differentiation and economies of density. The results not only provide support to some of the traditional common wisdom in the industry, but are also useful for understanding major puzzles concerning the evolution of the industry. The estimates indicate that a hubbing airline's ability to raise prices is focused on tickets that appeal to price-inelastic business travelers, who favor the origin-hub airline, even while paying an average premium of 20 percent. These high prices do not, however, provide a "monopoly umbrella" to other non-hub airlines. Finally, on the cost side there is evidence of economies of density (and therefore cost economies of hubbing) on longer routes. Consistent with the "Southwest Airlines" effect, there is not evidence of economies of density on shorter routes.

Bigarelli, Daniela

TI Regional Productive Systems in the Knitwear and Clothing Sectors in Italy: Industrial Structure and Training Needs. **AU** Brusco, Sebastiano; Bigarelli, Daniela.

Binder, Michael

PD April 1997. **TI** Solution of Multivariate Linear Rational Expectations Models and Large Sparse Linear Systems. **AU** Binder, Michael; Pesaran, M. Hashem. **AA** Binder: University of Maryland. Pesaran: University of Cambridge. **SR** University of Cambridge, Department of Applied Economics Working Paper. Amalgamated Series: 9708; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 13. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** C32, C63. **KW** Rational Expectations. Linear Systems. Differential Equations. Optimal Control. Optimal Filtering.

AB This paper establishes a link between the problem of solving multivariate linear rational expectations models and the problem of solving large sparse linear systems with a block-tridiagonal matrix coefficient structure. Such large linear systems arise in a wide variety of scientific problems. Two

numerical schemes that allow efficient solution of large sparse linear systems with a block-tridiagonal matrix coefficient structure are presented, and it is shown how these procedures can be readily adapted to solve multivariate linear rational expectations models. Furthermore, the solution of multivariate linear rational expectations models by means of solving large sparse linear systems is linked to the fully recursive method for the solution of multivariate linear rational expectations models recently advanced in Binder and Pesaran (1996).

Bisat, Amer

PD July 1997. **TI** Growth, Investment, and Saving in the Arab Economies. **AU** Bisat, Amer; El-Erian, Mohamed; Helbling, Thomas. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/85; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 33. **PR** not available. **JE** D24, E21, E22, N15, O40. **KW** Investment. Savings. Growth Accounting. Middle East. North Africa.

AB Sustaining a high rate of economic growth is the major policy issue facing the Arab economies. A detailed analysis of growth, investment, and savings for the period 1971-96, through a growth accounting exercise, shows that increasing long-run growth requires improvements in both investment and domestic savings. In the past, the Arab region's growth was overly reliant on volatile external sources of funding, and total factor productivity growth was too low. The paper discusses the policy priorities to overcome the legacy of poor growth.

Blejer, Mario

PD July 1997. **TI** Exogenous Shocks, Deposit Runs and Bank Soundness: A Macroeconomic Framework. **AU** Blejer, Mario; Feldman, Ernesto; Feltenstein, Andrew. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/91; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** D58, E42, E52, E63, G21. **KW** Bank Run. Monetary Policy. Solvency. Devaluation. Fiscal Policy.

AB In a model where all banks are initially solvent, an exogenous shock affects confidence, causing a flight from deposits into domestic and foreign currency. Real interest rates increase unexpectedly, affecting firms and raising the share of the banks' nonperforming assets. This increase causes genuine solvency problems and accelerates the bank run. Policy simulations show that compensatory monetary policy (increasing currency supply when deposits fall) mitigates the bank run but causes inflation and external imbalances. Combining compensatory monetary policy with tight fiscal policies also slows the bank run and mitigates insolvency, but at a lower macroeconomic cost. A devaluation is shown to have little positive impact.

Boadway, Robin

PD December 1996. **TI** Subsidies Versus Public Provision of Private Goods as Instruments for Redistribution. **AU** Boadway, Robin; Marchand, Maurice; Sato, Motohiro. **AA** Boadway: Queen's University. Marchand: Universite Catholique de Louvain. Sato: Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 942; Department of Economics; Institute for Economic Research, Queen's University; Kingston, Ontario; K7L 3N6; Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 21.

PR \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** H20, H42. **KW** In-Kind Transfers. Subsidies. Income Tax. Optimal Taxation.

AB The literature on the use of differential commodity taxes/subsidies and that on quantity controls to supplement income taxation have developed separately from each other. The purpose of this paper is to combine these two standard frameworks of optimal non-linear income taxation. The authors start from a simple model in which there are two types of households, the government has access to both subsidy policy and public provision of a good substitutable with leisure, and households can supplement the publicly provided good from the market. The authors present conditions when optimal policy should involve only one of these two instruments or a mixture of them alongside income taxation. They also consider alternative settings, including the extension to many types of households and the inability of households to supplement in-kind transfers.

PD May 1997. **TI** An Agency Model of Welfare and Disability Assistance. **AU** Boadway, Robin; Marceau, Nicolas; Sato, Motohiro. **AA** Boadway and Sato: Queen's University. Marceau: Université du Québec a Montreal. **SR** Queen's Institute for Economic Research Discussion Paper: 949; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 25. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** D82, H20, H53, I30. **KW** Tagging. Welfare Programs. Disability Benefit. Social Worker. Agency Problem.

AB This paper addresses the importance of the administrative costs of welfare systems by focusing on an agency problem arising between the government and social workers, whose job is to use tagging to determine eligibility for welfare benefits. Tagging is imperfect in that it involves type I and II errors, and its accuracy depends on the effort of the social workers, which is private information. Using the framework of optimal non-linear income taxation, the authors characterize second-best redistribution policies when the government can operate a welfare program alongside a negative income tax. The authors ultimate objective is to contribute to the debate concerning transferring income to the poor using welfare programs versus negative income tax systems. This involves trading off the costs of administering welfare relative to the benefits of tagging.

Bohn, Henning

PD April 1996. **TI** Balanced Budget Rules and Public Deficits: Evidence from the U.S. States. **AU** Bohn, Henning; Inman, Robert P. **AA** Bohn: University of California, Santa Barbara. Inman: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5533; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 50. **PR** \$5.00. **JE** H72. **KW** Balanced Budgets. Public Deficits. Budget Data.

AB Most states (Vermont is the exception) have constitutional or statutory limitation restricting their ability to run deficits in the state's general fund. Balanced budget limitations may be either prospective or beginning-of-the-year requirements or retrospective or end-of-the-year requirements. Using budget data from a panel of 47 U.S. states for the period 1970-1991, the analysis finds that states with end-of-the-year (not prospective) balance requirements enforced as

constitutional (not statutory) constraints by an independently elected (not politically appointed) state supreme court do have significant positive effects on a state's general fund surplus. The surplus is accumulated through cuts in spending, not through tax increases. It is saved in a state "rainy day" fund in anticipation of future general fund deficits. In contrast, prospective requirements, statutory end-of-the-year requirements, or constitutional end-of-the-year requirements enforced by a politically appointed court do not significantly constrain general fund deficit behavior. Finally, we find little evidence that the constraints "force" deficits into other fiscal accounts.

Bomfim, Antulio N.

PD March 1996. **TI** Bounded Rationality and Strategic Complementarity in a Macroeconomic Model: Policy Effects, Persistence and Multipliers. **AU** Bomfim, Antulio N.; Diebold, Francis X. **AA** Bomfim: Federal Reserve Board. Diebold: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5482; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** C53, E13, E61. **KW** Bounded Rationality. Strategic Complementarity.

AB Motivated by recent developments in the bounded rationality and strategic complementarity literatures, we examine an intentionally simple and stylized aggregative economic model, when the assumptions of fully rational expectations and no strategic interactions are relaxed. We show that small deviations from rational expectations, taken alone, lead only to small deviations from classical policy-ineffectiveness, but that the strategic the situation can change dramatically when strategic complementarity is introduced. Strategic complementarity magnifies the effects of even small departures from rational expectations, producing equilibria with policy effectiveness, output persistence and multiplier effects.

Boot, Arnoud W. A.

PD March 1997. **TI** Can Relationship Banking Survive Competition? **AU** Boot, Arnoud W. A.; Thakor, Anjan V. **AA** Boot: University of Amsterdam. Thakor: University of Michigan. **SR** Centre for Economic Policy Research Discussion Paper: 1592; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 52. **PR** 4 pounds or \$8.00. **JE** G10, G24. **KW** Financial Systems. Investment. Commercial Banking.

AB We develop a model of the banking firm that is intended to reflect contemporary trends in the evolution of banks. In particular, we focus on the effects of both interbank and capital market competition on the role of banks in funding corporations. In our model, banks can choose to provide loans that are similar to capital market funding (transaction loans) or loans that involve unique bank-specific services (relationship loans). Borrowers can choose one of these two types of bank loans or directly access the capital market. Our key result is that, contrary to what many believe, a bank's optimal response to increased competition is to expand relationship lending relative to its transaction lending. The behavior of the absolute level of relationship lending with respect to increasing competition is non-monotone. Initially, an elevation in

competition leads to an increase in the expected level of relationship lending, but then the expected level of relationship lending falls as competition rises further. Moreover, the viability of relationship banking depends significantly on the reputational quality of banks.

Boote, Anthony R.

PD March 1997. **TI** Debt Relief for Low-Income Countries and the HIPC Initiative. **AU** Boote, Anthony R.; Thugge, Kamau. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/24; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** F34, F35, F42, H63. **KW** External Debt. Debt Relief. World Bank. International Monetary Fund.

AB The paper describes the debt burden of low-income countries and the traditional mechanisms that have been implemented by the international community to alleviate this burden. While these mechanisms are sufficient to reduce the external debts of many heavily indebted poor countries (HIPC's) to sustainable levels provided these countries implement sound economic policies, they are likely insufficient for a number of countries. To deal with these cases, the World Bank and the IMF have jointly proposed and implemented the HIPC Initiative. The paper describes this initiative and suggests that it should enable HIPC's to exit from the debt rescheduling process.

Booth, Alison L.

PD February 1997. **TI** Training and Unions. **AU** Booth, Alison L.; Chatterji, Monojit. **AA** Booth: University of Essex. Chatterji: The University of Dundee. **SR** Centre for Economic Policy Research Discussion Paper: 1573; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 36. **PR** 4 pounds or \$8.00. **JE** J21, J23, J24, J41. **KW** Training. Quits. Wages. Monopsony. Trade Unions. Efficiency.

AB The paper examines the optimal level of training investment when trained workers are mobile, wage contracts are time-consistent, and training comprises both specific and general skills. It is shown that, in the absence of a social planner, the firm has ex-post monopsonistic power that drives trained workers' wages below the socially-optimal level. The emergence of trade union bargaining at the firm level can increase social welfare, however, by counterbalancing the firm's ex-post monopsonistic power in wage determination. Local union-firm wage bargaining ensures that the post-training wage is set sufficiently high to deter at least some quits, so that the number of workers the firm trains is nearer the socially-optimal number. The paper therefore sheds some light on the stylized facts that unions are associated with fewer quits and more firm-provided training.

PD February 1997. **TI** Modelling Work-Related Training and Training Effects Using Count Data Techniques. **AU** Booth, Alison L.; Arulampalam, Wiji; Elias, Peter. **AA** Booth: University of Essex. Arulampalam and Elias: University of Warwick. **SR** Centre for Economic Policy Research Discussion Paper: 1582; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 52. **PR** 4 pounds or \$8.00. **JE** C25, I21, J24, J30, J42. **KW** Count Data. Hurdle. Training Endogeneity. Selectivity Bias. Wages Growth.

AB This paper estimates the determinants of the number of work-related training courses, and their impact on expected wages growth, using longitudinal data from the British National Child Development Study. The analysis covers a crucial decade in the working lives of a cohort of young men -- from the age of 23 to 33. We use hurdle negative binomial models to estimate the number of work-related training events. This approach allows us to account for the fact that half of all sample members experienced no work-related training over the period from 1981 to 1991. We then estimate a wages growth model where the returns from the first training experience are allowed to differ from subsequent training experiences. The results generated from the hurdle count model are used to control for training endogeneity in the wages growth equation. This has not been done before in the training literature. The sensitivity of the wage growth estimates to alternative modeling strategies is also examined. Since we find a strong correlation between education and subsequent training experiences, we experiment with estimating the joint impact of previous education and subsequent training on wages growth, in order to tease out the combined effect of these variables. We find that the biggest returns to training are to highly educated men.

PD March 1997. **TI** Performance-Related Pay. **AU** Booth, Alison L.; Frank, J. **AA** Booth: University of Essex, Frank: Royal Holloway, University of London. **SR** Centre for Economic Policy Research Discussion Paper: 1593; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 36. **PR** 4 pounds or \$8.00. **JE** J33. **KW** Performance-Related Pay. Incentive Pay. Labor Productivity.

AB The paper extends the theoretical approach in Lazear (1986, 1996) to show that jobs with performance related pay (PRP) attract workers of higher unobservable ability, and also induce workers to provide greater effort. We then test some of the predictions of this model against data from the British Household Panel Survey, using earnings as a proxy for productivity. We find that PRP raises wages by about 9% for men and 6% for women over the entire (union and non-union) sample. Our theoretical calculations show that the estimated earnings differentials represent average productivity differentials net of monitoring costs, but not of the disutility of additional effort expended by workers. But the productivity differential is not a true productivity gain, for it includes a non-productive sorting effect as well as the effort effect. For all these reasons, the estimated return to PRP of 9% for men and 6% for women represents upper bounds on the productivity gains.

Bordo, Michael D.

PD March 1996. **TI** Getting Pegged: Comparing the 1879 and 1925 Gold Resumptions. **AU** Bordo, Michael D.; Bayoumi, Tamim. **AA** Bordo: Princeton University and National Bureau of Economic Research. Bayoumi: International Monetary Fund. **SR** National Bureau of Economic Research Working Paper: 5497; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** F31, F33, F36. **KW** Gold Convertibility. Foreign Exchange.

AB We compare the resumption of convertibility into gold by the United States in 1897 and Britain in 1925 to ascertain the degree to which the outcomes reflected differences in strategies

adopted by the authorities or in the external environment. It is concluded that external factors were the most important determinant of the very different outcomes of the two episodes.

Boughton, James

PD April 1997. **TI** Modeling the World Economic Outlook at the IMF: A Historical Review. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/48; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 20. **PR** not available. **JE** B23, F02, F47. **KW** World Economic Outlook. Forecasting. Economic History. International Monetary Fund.

AB The World Economic Outlook (WEO) exercise at the IMF evolved during the 1980's, partly in response to demands by policymakers in national finance ministries for objective and internationally comparable projections and policy scenarios. The exercise had begun as a staff initiative, encouraged by the Managing Director (Johannes Witteveen). Gradually, the Executive Board, the Interim Committee, the Group of Seven, and others came to view the discussion of the WEO documents as an important element in their efforts to keep abreast of world economic developments and prospects. Direct and indirect feedback from those discussions informed the staff as to how the exercise should be improved. Driven by this policy relevance, the WEO evolved from a decentralized project that was only haphazardly model-based into a more rigorous and coordinated exercise.

PD July 1997. **TI** From Suez to Tequila: The IMF as Crisis Manager. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/90; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** F33, F34, F42, N10. **KW** International Monetary Fund. Financial Crises. Crisis Management. Financial History.

AB The IMF was established in 1944 in part to "give confidence" to member countries by providing short-term credits. Although the intention was that the availability of the Fund's resources should prevent countries from experiencing financial crises, in practice the institution often has found itself helping its members cope with crises after they occur. This paper examines how the role of the IMF as crisis manager has evolved over time, from its earliest loans to the exchange crisis that hit Mexico in December 1994. It argues that the defining moment for this role was the international debt crisis of 1982.

Bound, John

PD April 1996. **TI** Race Differences in Labor Force Attachment and Disability Status. **AU** Bound, John; Schoenbaum, Michael; Waidmann, Timothy. **AA** Bound: University of Michigan and National Bureau of Economic Research. Schoenbaum: University of California, Berkeley. Waidmann: University of Michigan. **SR** National Bureau of Economic Research Working Paper: 5536; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** J15, J28, J71. **KW** Disability Status. Labor Force Attachment. Health Status.

AB We use the first wave of the Health and Retirement Survey to study the effect of health on the labor force activity of Black and White men and women in their 50's. The evidence we present confirms the notion that health is an extremely important determinant of early labor force exit. Our estimates suggest that health difference between Blacks and Whites can

account for most of the racial gap in labor force attachment for men. For women, where participation rates are comparable, our estimates imply that Black women would be substantially more likely to work than White women were it not for the marked health difference. We also find for both men and women that poor health has substantially larger effect on labor force behavior for Blacks. The evidence suggests that these differences result from Black/White differences in access to the resources necessary to retire.

Bradford, David F.

PD March 1996. **TI** Implicit Budget Deficits: The Case of a Mandated Shift to Community-Rated Health Insurance. **AU** Bradford, David F.; Max, Derrick A. **AA** Bradford: Princeton University and National Bureau of Economic Research. Max: American Enterprise Institute. **SR** National Bureau of Economic Research Working Paper: 5514; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** G22, I11, I18, I38. **KW** Health Insurance.

AB Since a typical regulatory mandate can be equated in its economic effect to a combination of an expenditure program and a tax program, observers have often suggested that it would serve consistent public policy to bring regulatory decisions into the same budgetary framework. This paper concerns an important example of a regulatory program that would mimic deficit financing in effecting a transfer of fiscal burdens toward younger and future generations, the mandated purchase of health care insurance under a system of community rating, under which the same price is charged for health insurance for all comers, regardless of age, sex, or health condition. Such a shift would result in redistributions of burdens across birth cohorts, in this case from existing, especially middle-aged birth cohorts toward young and future generations. Using data from a variety of sources, we conclude that the effect would be substantial. For our central-case assumptions about discount, health care cost, and productivity growth rates, and about the locus of responsibility for paying health care bills, a shift to community rating is estimated to generate gains for people over age 30 in 1994, \$16,700 per person aged 50 for example, at the cost to younger cohorts.

Braumann, Benedikt

PD June 1997. **TI** Unemployment Persistence and Capital Shortage: The Case of Trinidad and Tobago. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/77; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** D91, E21, E22, E24, E61. **KW** Unemployment. Capital Shortage. Overlapping Generations. Savings. Monopolistic Competition.

AB This paper examines the link between capital stock and unemployment persistence. An overlapping-generations model with endogenous labor supply and imperfect competition is presented. It is used to interpret the unusual persistence of unemployment in Trinidad and Tobago during the last twenty years. Although real wages are 60 percent lower today than in the mid-1980's, unemployment continues to be very high. The paper argues that an important part of the explanation lies in the decline of capital stock in this country after years of very low savings and investment. Policies to address this capital shortage are discussed.

Brewer, Domenic

PD June 1996. **TI** Does It Pay to Attend an Elite Private College? Cross Cohort Evidence on the Effects of College Quality on Earnings. **AU** Brewer, Domenic; Eide, Eric; Ehrenberg, Ronald G. **AA** Brewer: RAND Corporation. Eide: Brigham Young University. Ehrenberg: Cornell University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5613; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** \$5.00. **JE** D82, J23, J24, J31. **KW** Education. Labor Market. College Selection.

AB While there is evidence of a substantial and rising labor market premium associated with college attendance in general, little is known about how this premium varies across institutions of different quality and across time. Previous research which has estimated the return to college quality has not taken into account that individuals likely select the type of college they attend based in part on the expected economic return and net costs. This paper explicitly models high school students' choice of college type based on individual and family characteristics and an estimate of the net costs of attendance and expected labor market return. The paper estimates selectivity corrected outcome equations, using data from both the National Longitudinal Study of the High School Class of 1972 and High School and Beyond. There is strong evidence of significant economic return to attending an elite private institution.

Brixiova, Zuzana

PD August 1997. **TI** On the Speed of Transition in Central and Eastern Europe: Does On-the-Job Search Matter? **AA** University of Minnesota and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/102; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 19. **PR** not available. **JE** J21, J64, O11, P50. **KW** Unemployment. Job Search. Central Europe. Eastern Europe. Transition Economies.

AB This paper examines how the on-the-job search of workers in the state sector who are seeking jobs in the private sector affects private sector employment, the unemployment level, and the unemployment duration in the transition economies of Central and Eastern Europe. The main finding is that on-the-job searching can account for the coexistence of a quickly growing private sector and a high unemployment level of long duration. The paper also addresses the issue of the optimal (output maximizing) rate of state sector closure and finds that the rate is slower when workers are simultaneously job hunting than when they are not.

Brooks, Robin

PD October 1995. **TI** When is the Standard Analysis of Common Property Extraction Under Free Access Correct? A Game-Theoretic Justification for Non Game-Theoretic Analyses. **AU** Brooks, Robin; Controneo, Jill; Murray, Michael; Salant, Stephen. **AA** Brooks and Murray: Bates College. Controneo: University of Chicago. Salant: University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/10; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 21. **PR** \$4.00; payable to the Department of Economics. **JE** C72, Q20, Q30. **KW** Common Property. Free Access.

Nash Equilibrium. Rent Dissipation. Subgame Perfection.

AB Analyses of common property extraction under "free access" used to assume period-by-period rent dissipation thus avoiding the use of game theory. More modern analyses instead deduce the subgame perfect Nash equilibrium of the common property game and then investigate its free-access limit. Salant and Negri (1987) provided a troubling example where these two methodologies yield radically different predictions: while the older analysis predicts eventual extinction of the resource, the game-theoretic analysis predicts unlimited growth. We review and simplify their example and then provide weak conditions insuring that the two methodologies yield the same predictions.

Brown, Charles

PD May 1996. **TI** Sex-Based Differences in School Content and the Male/Female Wage Gap. **AU** Brown, Charles; Corcoran, Mary. **AA** University of Michigan and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5580; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** J16, J24, J31. **KW** School Content. Wage Gap.

AB In high school and in college, men and women take significantly different courses. Using data from the Survey of Income and Program Participation and the National Longitudinal Study Class of 1972, we relate these differences in school content to sex differences in adult wages. Differences in field of highest degree account for a significant part of the male-female wage gap among college graduates, but differences in coursework account for very little of the equally large wage gap between men and women with less schooling. We find little consistent evidence that men receive larger rewards for taking traditionally male rather than traditionally female courses and majors, though there is some indication of this for college graduates.

Brunekreeft, Gert

PD November 1996. **TI** The 1996 Reform of the Electricity Supply Industry in the Netherlands. **AA** Albert-Ludwigs-University Freiburg and University of Cambridge. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9705; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 17. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** L13, L43, L51, L94, Q48. **KW** Electricity. Netherlands. Market Power. Regulation.

AB This paper describes and assesses a proposal put forward by the Dutch Department of Economic Affairs in July 1996 for structural reform of the electricity industry. The reasons for the reform are described first. Then, the reform proposal itself is described. Its main features are the creation of a dominant generating firm by merging the four current generating firms, with free entry at the generating and distribution-service stages. Confusingly, the sector will remain structurally separated, although not in ownership. Finally, there is a critical assessment of the proposal for a dominant generating firm and deliberately voluntary dispatch, and remaining regulatory issues.

Brunello, Giorgio

TI Fast Track: Is it in the Genes? The Promotion Policy of a Large Japanese Firm. **AU** Ariga, Kenn; Brunello, Giorgio; Ohkusa, Yasushi.

Brusco, Sebastiano

PD March 1997. **TI** Regional Productive Systems in the Knitwear and Clothing Sectors in Italy: Industrial Structure and Training Needs. **AU** Brusco, Sebastiano; Bigarelli, Daniela. **AA** Brusco: University of Modena. Bigarelli: Istituto de Ricerca. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP51; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. Website: www.econ.cam.ac.uk/dae. **PG** 43. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** J40, L23, L67, O18, R30. **KW** Production. Innovation. Regional Variations. Italy. Survey.

AB This paper reports results from an interview with a sample of 6,000 knitwear and clothing firms in nine Italian regions. The findings of the study show that each region has developed its own particular productive system, with very clear-cut differences both in features and in training and services needs. Among the regions studied, there are two principal "models" of productive systems. Between these two extreme models, there is an extraordinary variety of regional productive systems. The findings of the study also show that the productive system of some Southern Italian regions complements that of Northern regions. These differences in regional productive systems hint at very different training needs.

Bui, Linda T. M.

PD September 1995. **TI** Gains From Trade in the Optimal Control of Environmental Externalities: Evidence From Acid Rain Abatement in the Eastern United States and Canada. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/06; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 62. **PR** \$4.00; payable to the Department of Economics. **JE** D61, D62, Q25. **KW** Acid Rain. Pollution Licenses. Tradeable Permits. Canada. Free Riding.

AB This paper investigates a system of internationally traded "licenses to pollute" for acid rain control in the Eastern U.S. and Canada. The author reports cost estimates of a 15 percent reduction in acid rain concentrations under a joint tradeable permit system for sulfur dioxide emissions. The author uses point-source data for the 200 largest sulfur dioxide emitters in each of Canada and the United States, transfer coefficients that relate emissions in different regions to acid rain concentrations in specified "sensitive receptor" regions, and fitted cost functions for each point source, to estimate the costs facing each country under different abatement programs. The estimates show (1) that an autarkic program of abatement induces significant spillover benefits in the other country leading to a potential for "free-riding", and (2) that a joint program of abatement would lead to substantial, although differential, cost savings.

Buiter, Willem

PD April 1997. **TI** Aspects of Fiscal Performance in some Transition Economies Under Fund-Supported Programs.

AA International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/31; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 41. **PR** not available. **JE** E58, E62, F34, H11, O57. **KW** Sustainability. Development. Fiscal Policy. Monetary Policy.

AB Key medium- and longer-term fiscal issues faced by transition economies are reviewed, including government solvency and the sustainability of the fiscal-financial-monetary program. The paper aims to assist the design and implementation of future Fund programs and to contribute to the debate about fiscal policy in transition economies. After presenting a framework for evaluating the sustainability of the fiscal-financial-monetary program of the state, some numerical material is presented on public debt, (quasi-) fiscal deficits and monetary financing. Eight budgetary issues of special relevance to transition economies are considered next. The lessons from this study are summarized in a number of propositions.

Buiter, Willem H.

PD April 1997. **TI** Enterprises in Transition: Macroeconomic Influences on Enterprise Decision-making and Performance. **AU** Buiter, Willem H.; Lago, Ricardo; Rey, Helene. **AA** Buiter: University of Cambridge. Lago: European Bank for Reconstruction and Development. Rey: London School of Economics. **SR** Centre for Economic Policy Research Discussion Paper: 1601; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 48. **PR** 4 pounds or \$8.00. **JE** D23, E22, E63, O10, O57, P52. **KW** Transition Economies. Macroeconomic Stability. Enterprise Performance.

AB The paper analyzes the theoretical arguments and empirical evidence linking enterprise performance in transition economies to the macroeconomic environment. Macroeconomic instability is traced to the unsustainability of the fiscal-financial and monetary policies of the state and to regulatory and other failures leading to problems with the solvency of financial institutions. The importance of macroeconomic stability for enterprise performance is documented with a simulation study and by reviewing relevant microeconomic and aggregate empirical evidence from across the world as well as from the transition economies themselves. Conclusions are reached about the speed of transition, about the synergy between macroeconomic stabilization and market development and about the creation of institutions for achieving and maintaining macroeconomic stability.

Bulow, Jeremy

PD January 1997. **TI** The Generalized War of Attrition. **AU** Bulow, Jeremy; Klemperer, Paul. **AA** Bulow: Stanford University. Klemperer: University of Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 1564; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 28. **PR** 4 pounds or \$8.00. **JE** D43, D44, L13, O30. **KW** War of Attrition. Auctions. Natural Monopoly. Oligopoly. Strategic Independence. Political Decision-Making.

AB We generalize the War of Attrition model to allow for $N+K$ firms competing for N prizes. Two special cases are of particular interest. First, if firms continue to pay their full costs after dropping out (as in a standard-setting context), each firm's exit time is independent both of K and of the actions of other players. Second, in the limit in which firms pay no costs after

dropping out (as in a natural-oligopoly problem), the field is immediately reduced to $N+1$ firms. Furthermore, we have perfect sorting, so it is always the $K-1$ lowest-value players who drop out in zero time, even though each player's value is private information to the player. We apply our model to politics, explaining the length of time it takes to collect a winning coalition to pass a bill.

Caballero, Ricardo J.

PD March 1996. **TI** Fixed Costs: The Demise of Marginal q . **AU** Caballero, Ricardo J.; Leahy, John V. **AA** Caballero: Massachusetts Institute of Technology and National Bureau of Economic Research. Leahy: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5508; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 14. **PR** \$5.00. **JE** E22, G31. **KW** Marginal q . Investment Function. Fixed Costs.

AB The standard version of q theory, in which investment is positively related to marginal q , breaks down in the presence of fixed costs of adjustment. With fixed costs, investment is a non-monotonic function of q . Therefore, its inverse, which is the traditional investment function, does not exist. Depending upon auxiliary assumptions, the correlation between investment marginal q can be either positive or negative. Given certain homogeneity assumptions, a version of the theory based on average q still holds, although under the same assumption profits and sales perform as well as average q . More generally, q is no longer a sufficient statistic.

Cadot, Olivier

PD February 1997. **TI** Lobbying and the Structure of Protection. **AU** Cadot, Olivier; de Melo, Jaime; Olarreaga, Marcelo. **AA** Cadot: INSEAD. de Melo: World Bank. Olarreaga: University of Geneva. **SR** Centre for Economic Policy Research Discussion Paper: 1574; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 32. **PR** 4 pounds or \$8.00. **JE** F13. **KW** Endogenous Tariff. Political Economy.

AB This paper extends the influence-driven model of trade policy determination to include general equilibrium effects on the supply side resulting from labor-market interaction and intermediate goods. The model's predictions for the structure of protection are related to underlying taste and technology parameters, and we derive analytically several propositions that are consistent with the stylized results of the empirical literature. Finally, numerical simulations are carried out for archetypal "rich" and "poor" economies. It turns out that the endogenously-determined structure of protection is broadly consistent with the observed pattern of protection in rich and poor economies, suggesting the usefulness of the approach.

Cain, Glen G.

TI Shifts in US Relative Wages: The Role of Trade, Technology and Factor Endowments. **AU** Baldwin, Robert E.; Cain, Glen G.

Campbell, John

PD May 1996. **TI** A Scorecard for Indexed Government Debt. **AU** Campbell, John; Shiller, Robert J. **AA** Campbell: Harvard University and National Bureau of Economic Research. Shiller: Yale University and National

Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5587; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** E43, E44, E52, H81. **KW** Debt Indexation. Government Bonds. Fiscal Policy. Monetary Policy.

AB Within the last five years, Canada, Sweden and New Zealand have joined the ranks of the United Kingdom and other countries in issuing government bonds that are indexed to inflation. Some observers of the experience in these countries have argued that the United States should follow suit. This paper provides an overview of the issues surrounding debt indexation, and it tries to answer three empirical questions about indexed debt. First, how different would the returns on indexed bonds be from the returns on existing U.S. debt instruments? Second, how would indexed bonds affect the government's average financing costs? Third, how might the Federal Reserve be able to use the information contained in the prices of indexed bonds to help formulate monetary policy? The paper concludes with a more speculative discussion of the possible consequences of increased use of indexed debt contracts by the private sector.

PD June 1996. **TI** Consumption and the Stock Market: Interpreting International Experience. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5610; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** D81, E21, G11, G12, G15. **KW** Risk Aversion. Asset Pricing. Consumption.

AB This paper reviews the behavior of stock prices in relation to consumption. The paper lists some important stylized facts that characterize U.S. data, and relates them to recent developments in equilibrium asset pricing theory. Data from other countries are examined to see which features of the U.S. experience apply more generally. The paper argues that to make sense of stock market behavior one needs a model in which investors' risk aversion is both high and varying, such as the external habit-formation model of Campbell and Cochrane (1995).

Campillo, Marta

PD April 1996. **TI** Why Does Inflation Differ Across Countries? **AU** Campillo, Marta; Miron, Jeffrey A. **AA** Campillo: Boston University. Miron: Boston University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5540; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** E31. **KW** Inflation. Openness.

AB This paper attempts to explain the differences in inflation performance across countries. Earlier research has examined this topic, but it has considered only some of the factors that might be empirically important determinants of inflation rates. We consider the distaste for inflation, optimal tax considerations, time consistency issues, distortionary non-inflation policies and other factors that might be empirically important determinants of inflation performance. Overall, the results suggest that institutional arrangements -- central bank independence or exchange rate mechanisms -- are relatively unimportant determinants of inflation performance, while economic fundamentals -- openness and optimal tax considerations -- are relatively important determinants.

Canonero, Gustavo

PD April 1997. **TI** Bank Concentration and the Supply of Credit in Argentina. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/40; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 10. **PR** not available. **JE** E42, E44, E51, E58. **KW** Argentina. Banking Concentration. Credit Supply. Information Asymmetries. Central Banks.

AB This paper examines the effects on the supply of credit of the concentration of financial institutions in Argentina that followed the crisis caused by the December 1994 devaluation of the Mexican peso. While the concentration process may have improved the efficiency of domestic financial intermediation, the analysis suggests that, due to the presence of information asymmetries in the banking sector, it also may have contributed to the contraction in bank lending observed during 1995.

Canova, Fabio

PD March 1997. **TI** Stock Returns, Term Structure, Inflation and Real Activity: An International Perspective. **AU** Canova, Fabio; De Nicolo, Gianni. **AA** Canova: Universitat Pompeu Fabra. De Nicolo: Brandeis University. **SR** Centre for Economic Policy Research Discussion Paper: 1614; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 21. **PR** 4 pounds or \$8.00. **JE** C15, E43. **KW** Transmission. Business Cycles. International Assets. Financial Markets.

AB This paper analyzes the empirical interdependence of asset returns, real activity and inflation from a multi-country and international point of view. We find that nominal stock returns are significantly related to inflation only in the United States, that the U.S. term structure of interest rates predicts both domestic and foreign inflation rates while foreign term structures do not have this predictive power and that innovations in inflation and exchange rates induce insignificant responses of real and financial variables. An interpretation of the dynamics and some policy implications of the results are provided.

Card, David

PD March 1996. **TI** Changes in the Relative Structure of Wages and Employment: A Comparison of the United States, Canada, and France. **AU** Card, David; Kramarz, Francis; Lemieux, Thomas. **AA** Card: Princeton University and National Bureau of Economic Research. Kramarz: INSEE. Lemieux: University of Montreal and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5487; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** J31, J64. **KW** Wage Structure. Minimum Wage. Unions. Wage Inflexibilities.

AB Standard models suggest that adverse labor demand shocks will lead to bigger employment losses if institutional factors like minimum wages and trade unions prevent downward wage adjustments. Some economists have argued that this insight explains the contrast between the United States, where real wages fell over the 1980's and aggregate employment expanded vigorously, and Europe, where real wages were (roughly) constant and employment was stagnant. We test this hypothesis by comparing changes in wages and

employment rates over the 1980's for different age and education groups in the United States, Canada, and France. We argue that the same forces that led to falling real wages for less-skilled workers in the U.S. affected similar workers in Canada and France. Consistent with the view that labor market institutions are more rigid in France, and more flexible in the U.S., we find that relative wages of less-skilled workers fell the most in the U.S., fell somewhat less in Canada, and did not fall at all in France. Contrary to expectations, however, we find little evidence that wage inflexibilities generated divergent patterns of relative employment growth across the three countries.

PD April 1996. **TI** Does Inflation "Grease the Wheels of the Labor Market"? **AU** Card, David; Hyslop, Dean. **AA** Card: Princeton University and National Bureau of Economic Research. Hyslop: University of California, Los Angeles. **SR** National Bureau of Economic Research Working Paper: 5538; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 43. **PR** \$5.00. **JE** E31, J31. **KW** Wage Rigidities. Inflation. Nominal Wages. Downward Rigidity. Wage Adjustments.

AB If nominal wages are downward rigid, moderate levels of inflation may improve labor market efficiency by facilitating real wage cuts. In this paper we attempt to test the hypothesis that downward real wage changes occur more readily in higher-inflation environments. Using individual wage change data from two sources, we find that about 6-10 percent of workers experience nominally rigid wages in a 10-percent inflation environment. This proportion rises to over 15 percent at a 5 percent inflation rate. We use the assumption of symmetry to generate counterfactual distributions of real wage changes in the absence of rigidities. These counterfactual distributions suggest that a 1 percent increase in the inflation rate reduces the fraction of workers with downward-rigid wages by about 0.8 percent, and allows real wages to fall about 0.06 percent faster. A market-level analysis of the effects of nominal rigidities, based on wage growth and unemployment at the state level, is less conclusive. We find only a weak statistically relationship between the rate of inflation and the pace of relative wage adjustments across local labor markets.

Carlin, Wendy

PD April 1997. **TI** Quantifying a Dangerous Obsession? Competitiveness and Export Performance in an OECD Panel of Industries. **AU** Carlin, Wendy; Van Reenen, John; Glyn, Andrew. **AA** Carlin: University College London. Van Reenen: Institute for Fiscal Studies and University College London. Glyn: University of Oxford. **SR** Centre for Economic Policy Research Discussion Paper: 1628; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 22. **PR** 4 pounds or \$8.00. **JE** F10, J30. **KW** Exports. Competitiveness. Panel Data.

AB This paper analyses the impact of cost competitiveness and technology on export performance using a very rich panel dataset of 12 manufacturing industries in 14 OECD countries for the period between 1970 and 1992. Consistent with standard models, we find that changes in relative unit labor costs are a robust determinant of changes in export market shares. In the long run a 10% increase in relative unit labor costs leads to a fall of between 2% and 3% of export market share. Despite this, the trends in national export performance cannot be fully

explained by relative costs. This points to the importance of non-price factors, and extending the model to allow for technology effects (including R&D and patents) on quality provides some evidence for the importance of higher relative investment rates. Allowing for heterogeneity in the effect of relative costs in different industries, different countries and different time periods suggests that labor cost changes are less important in high technology industries, in periods of high demand and in countries within the European Monetary System.

Carlson, John

PD August 1997. **TI** Debt Reduction and New Loans: A Contracting Perspective. **AU** Carlson, John; Husain, Aasim; Zimmerman, Jeffrey. **AA** Carlson: Purdue University. Husain: International Monetary Fund. Zimmerman: Methodist College. **SR** International Monetary Fund Working Paper: WP/97/95; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 16. **PR** not available. **JE** F34. **KW** International Debt. Debt Rescheduling. Debt Forgiveness. Debt Contracts.

AB International debt contracts can incorporate, at least implicitly, contingencies governing debt reduction. This paper examines a series of debt contracts that allow for the possibility of rescheduling, forgiveness, and rescheduling with forgiveness. The contract with both rescheduling and forgiveness permits a higher credit ceiling than other types of debt contracts, and contains features found in the HIPC and other recent debt reduction initiatives. If an adverse state of nature occurs, some of the debt is forgiven, a portion is rescheduled, and the remainder is repaid. At the same time, the debtor country is a net recipient of new loans.

Carnall, Michael

TI Airline Hubs: Costs, Markups and the Implications of Customer Heterogeneity. **AU** Berry, Steven; Carnall, Michael; Spiller, Pablo T.

Carraro, Carlo

PD March 1997. **TI** From Learning to Partnership. Multinational R&D Cooperation in Developing Countries. **AU** Carraro, Carlo; Navaretti, Giorgio Barba. **AA** Carraro: Università degli Studi di Venezia. Barba Navaretti: Università degli Studi di Milano. **SR** Centre for Economic Policy Research Discussion Paper: 1579; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 48. **PR** 4 pounds or \$8.00. **JE** F23, L22, O32. **KW** Multinational Firms. International Business. Technological Innovation. R&D. Firm Organization. Market Structure.

AB This paper is a first attempt to analyze the determinants of inter-firm R&D agreements between advanced and developing countries, i.e. between firms with asymmetric endowments of knowledge. It shows that international dispersion of R&D activity by multinationals also concerns developing countries, particularly the New Industrialized Countries (NIC's). Indeed, both our theory and empirical evidence show that R&D can be carried out via arm's-length agreements, even between partners with asymmetric endowments of knowledge. The paper develops a theoretical model which brings together some of the central assumptions of the literature on R&D cooperation and of the literature on hierarchical transfer of technology. The empirical analysis is

based on a data set of international arm's-length agreements. By testing a dichotomous choice model, it supports some of the key theoretical results and assumptions: R&D agreements are particularly likely to emerge when firms have a non-hierarchical relationship, in knowledge-intensive industries, and when technological asymmetries between home and host countries are not too large. Indeed, most R&D agreements are concentrated in the NIC's which have relatively advanced industrial bases and capabilities.

Case, Anne

PD May 1996. **TI** Large Cash Transfers to the Elderly in South Africa. **AU** Case, Anne; Deaton, Angus. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5572; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** H55, J14. **KW** Elderly. South Africa. Social Pension. Transfers.

AB We examine the social pension in South Africa, where large cash sums -- about twice the median per capita income of African households -- are paid to people qualified by age but irrespective of previous contributions. We present the history of the scheme and use a 1993 nationally representative survey to investigate the redistributive consequences of the transfers, documenting who receives the pensions, their levels of living, and those of their families. We also look at behavioral effects, particularly the effects of the cash receipts on the allocation of income to food, schooling, transfers, and savings. Two methodological issues run through our analysis. The first is the danger of interpreting simple correlations and regressions without adequate consideration of likely biases. The second is the problem of measuring the effects of a program that is determined by individual or household characteristics. We examine both in the context of the South African pension. Our results are consistent with the view that pension income is spent in much the same way as other income, and that a rand is a rand, regardless of its source.

Casella, Alessandra

PD February 1997. **TI** Product Standards Coalitions in a Market Without Borders. **AA** Columbia University. **SR** Centre for Economic Policy Research Discussion Paper: 1584; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 36. **PR** 4 pounds or \$8.00. **JE** F12, F15, H41, K32, L16. **KW** Standards. Coalitions. Market Integration.

AB Traditional analyses of standards in international trade identify standards as government regulations and investigate the potential for distortion of trade flows. In reality, however, private industry groups exercise critical influence on the determination of technical standards. The composition of these groups is affected by technology and market conditions, and in an integrated market the alliances of private firms are likely to cross national boundaries, generating harmonization "from the bottom." If standards are public goods whose ideal value differs across economic activities and across countries, economic integration should bring increased harmonization across countries and finer differentiation across products. Empirical evidence from the United States and the European Union, although mostly anecdotal, supports this prediction.

Catao, Luis

PD March 1997. **TI** Bank Credit in Argentina in the Aftermath of the Mexican Crisis: Supply or Demand Constrained? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/32; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** D82, E24, E44, E51. **KW** Argentina. Adverse Selection. Credit. Financial Markets. Unemployment.

AB Liquidity in the banking sector in Argentina reached new heights in early 1996 with the sharp reflow of deposits in the aftermath of the 1995 banking crisis. Yet, this did not translate into a similar recovery of credit to the private sector. Two hypotheses have been raised to explain this mismatch. One is that credit to the private sector was supply constrained because of adverse selection mechanisms exacerbated by the crisis. An alternative hypothesis is that credit was demand constrained, as unemployment remained high and the debt stock adjustment unwound only slowly through the first half of 1996. This paper examines these hypotheses.

Caucutt, Elizabeth M.

PD November 1996. **TI** Peer Group Effects in Applied General Equilibrium. **AA** University of Minnesota. **SR** University of Minnesota Center for Economic Research Discussion Paper: 293; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 53. **PR** no charge. **JE** D58, D82, H42, I22. **KW** Peer Group. Education. General Equilibrium. Welfare. Human Capital.

AB In this paper, the author analyzes private school formation and composition, when a student's educational achievement depends upon the student's type and the school's peer group and per student expenditures. The author develops applied general equilibrium techniques to find equilibrium consumption and schooling structure, in the presence of peer group effects. She finds that, depending upon the specification of the technology which converts these inputs into educational achievement, a variety of outcomes can arise in equilibrium. For example there can be segregation or mixing across schools, or a combination of both. Lastly, the author considers the welfare and distributional effects of three policy changes. It is shown that equalizing expenditures across schools reduces the range and the standard deviation of the distribution of human capital, as does forcing certain forms of integration. Both policies imply a welfare loss. A voucher system is also studied.

Caulkins, Jonathan P.

TI Sulfur Dioxide Compliance of a Regulated Utility. **AU** Fullerton, Don; McDermott, Shaun P.; Caulkins, Jonathan P.

Chaloupka, Frank J.

PD April 1996. **TI** Public Policy and Youth Smokeless Tobacco Use. **AU** Chaloupka, Frank J.; Grossman, Michael; Tauras, John A. **AA** Chaloupka: University of Illinois at Chicago and National Bureau of Economic Research. Grossman: City University of New York and National Bureau of Economic Research. Tauras: University of Illinois at Chicago. **SR** National Bureau of Economic Research Working Paper: 5524; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 14. **PR** \$5.00. **JE** D12, I18.

KW Smokeless Tobacco. Young Males. Tobacco Tax.

AB While much is known about the effects of prices and tobacco control policies on cigarette smoking, relatively little is known about their impact on smokeless tobacco use. This paper addresses these issues using data on smokeless tobacco use by adolescent males taken from the 1992, 1993, and 1994 Monitoring the Future Surveys. Site-specific smokeless tobacco tax data and several measures of limits on youth access to tobacco products are added to the survey data. Ordered probit methods are used to examine the impact of prices and tobacco control policies on the frequency of smokeless tobacco use among young males. Comparable two-part models are estimated for participation in smokeless tobacco use and for conditional smokeless tobacco demand. The estimates indicate that increases in smokeless tobacco taxes would lead to significant reductions in both the number of young men using smokeless tobacco taxes and in the frequency of smokeless tobacco use. In addition, strong limits on youth access to smokeless tobacco products are found to be effective in reducing both participation in smokeless tobacco use and the frequency of smokeless tobacco use by young males.

PD April 1996. **TI** U.S. Trade Policy and Cigarette Smoking in Asia. **AU** Chaloupka, Frank J.; Laixuthai, Adit. **AA** Chaloupka: University of Illinois at Chicago and National Bureau of Economic Research. Laixuthai: Chulalongkorn University. **SR** National Bureau of Economic Research Working Paper: 5543; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 17. **PR** \$5.00. **JE** D12, I12. **KW** Trade Policy. Cigarette Smoking. Asia.

AB During the 1980's and early 1990's, the cigarette markets in Japan, Taiwan, South Korea, and Thailand were opened to U.S. cigarettes through actions taken under Section 301 of the 1974 Trade Act and its subsequent amendments. Using pooled annual time-series data from ten Asian countries, the impact of the Section 301 agreements on the market share of U.S. cigarettes and on per capita cigarette consumption is examined. Estimates from fixed effects models indicate that the market share of U.S. cigarettes in Japan, Taiwan, South Korea, and Thailand increased dramatically after the agreements as consumers switched from the brands produced by domestic monopolies to the brands of U.S. cigarette producers. In addition, simulations based on regression results indicate that per capita cigarette consumption in 1991 in the four affected countries was nearly ten percent higher than it would have been had the markets remained closed to U.S. cigarettes.

Chand, Sheetal

PD August 1997. **TI** Controlling Fiscal Corruption. **AU** Chand, Sheetal; Moene, Karl. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/100; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 16. **PR** not available. **JE** D11, D81, J31, J33, K42. **KW** Fiscal Performance. Corruption. Fiscal Officers. Tax Evasion. Ghana.

AB This paper examines the issue of controlling fiscal corruption by providing incentives to fiscal officers. First, a case study of a successful attack on corruption is presented that shows the importance of attending to the conditions of service of fiscal officers. Second, a model is developed drawing on the conclusions of the case study that shows their consistency with optimization behavior. It confirms that simply providing bonuses is not enough. Corruption at higher levels of

management has to be contained so as to allow bonuses to become more effective, and thereby to initiate a virtuous circle.

Chari, V. V.

PD April 1996. **TI** Expectations Traps and Discretion. **AU** Chari, V. V.; Christiano, Lawrence J.; Eichenbaum, Martin. **AA** Chari: University of Minnesota. Christiano and Eichenbaum: Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5541; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 34. **PR** \$5.00. **JE** E50. **KW** Expectations Traps. Discretion. Monetary Policy.

AB We argue that discretionary monetary policy exposes the economy to welfare-decreasing instability. It does so by creating the potential for private expectations about the response of monetary policy to exogenous shocks to be self-fulfilling. Among the many equilibria that are possible, some have good welfare properties. But others exhibit welfare-decreasing volatility in output and employment. We refer to the latter type of equilibria as expectations traps. In effect, our paper presents a new argument for commitment in monetary policy because commitment eliminates these bad equilibria. We show that full commitment is not necessary to achieve the best outcome, and that more limited forms of commitment suffice.

Chatterji, Monojit

TI Training and Unions. **AU** Booth, Alison L.; Chatterji, Monojit.

Cheikbossian, Guillaume

TI The New Geography of Eastern European Trade. **AU** Maurel, Mathilde; Cheikbossian, Guillaume.

Chen, Zhaohui

PD January 1997. **TI** Patterns of Capital Flows to Emerging Markets: A Theoretical Perspective. **AU** Chen, Zhaohui; Khan, Mohsin S. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/13; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 31. **PR** not available. **JE** F21, F41, G15, G32, O16. **KW** Capital Flows. Emerging Markets. Financing Cost. Contracts. Regulation.

AB This paper reviews some of the basic patterns of international capital flows to emerging markets in recent years, including the composition of capital flows, intraregional flow patterns, and the geographical distribution of the flows. A theoretical model that sheds new light on these observed patterns is developed. This model focuses on the cost of financing aspect of capital flows, and shows that the patterns of capital flows are influenced by the combined effects of financial market development and growth potential in the recipient countries. The theoretical predictions of the model are shown to be consistent with the stylized facts.

Chick, Victoria

PD November 1996. **TI** Two Essays on Equilibrium: 1. Equilibrium and "Determination" in Open Systems. 2. A Struggle to Escape: Equilibrium in the General Theory. **AA** University College London. **SR** University College London Discussion Paper: 96/26; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. **PG** 14. **PR** 4 pounds. **JE** B22, B31, B41,

E12. **KW** Equilibrium. Methodology. Keynes.

AB 1. The author argues that one of the lasting contributions of Keynes was to create a concept of equilibrium which is compatible with open-system theorizing. While in the "maintained method" of the mainstream, the determination of the values of variables and equilibrium are both identified with market clearing, in Keynes's model there is always an outcome, but these values do not require, or imply, either market clearing or equilibrium. 2. Keynes sought a theory which would hold in both equilibrium and disequilibrium, and he also sought a theory which would acknowledge the uncertainty of an unknown future. This ambition has led to misinterpretation by those wedded to the concept of equilibrium as market clearing and also by those who adhere to the idea of the classical long run. The paper distinguishes three models in "The General Theory" and discusses their dynamic properties and the equilibrium which pertains to each.

Chinn, Menzie

PD May 1997. **TI** Real Exchange Rate Levels, Productivity and Demand Shocks: Evidence from a Panel of 14 Countries. **AU** Chinn, Menzie; Johnston, Louis. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/66; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 20. **PR** not available. **JE** C22, C23, E23, F31. **KW** Exchange Rates. Foreign Exchange. Productivity. Cointegration. Fiscal Policy.

AB We investigate the long-run relationship between the real exchange rate, traded and nontraded productivity levels, and government spending for 14 OECD countries, using recently developed panel cointegration tests. The results indicate that under certain assumptions it is easier to detect cointegration in panel data than in the available time series; moreover, the rate of reversion to long-run equilibrium is estimated with greater precision. Using the model augmented by oil prices, we find that in 1991 (the last year productivity data are available) there is less overvaluation of the U.S. dollar than that implied by a naive version of purchasing power parity.

Christiano, Lawrence J.

TI Expectations Traps and Discretion. **AU** Chari, V. V.; Christiano, Lawrence J.; Eichenbaum, Martin.

Christodoulakis, Nicos M.

PD April 1997. **TI** Economic Developments in the Balkan Countries and the Role of Greece: From Bilateral Relations to the Challenge of Integration. **AU** Christodoulakis, Nicos M.; Petrakos, George. **AA** Christodoulakis: Athens University of Economics and Business. Petrakos: University of Thessaly. **SR** Centre for Economic Policy Research Discussion Paper: 1620; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 28. **PR** 4 pounds or \$8.00. **JE** F15, O11, O15, R58. **KW** Economic Integration. Economic Development. Migration. Regional Development.

AB Throughout the post-war period Greece has faced a unique, and unfavorable, situation consisting of: (i) a perimetric location away from major European markets; and (ii) distorted economic relations as its northern borders were designed to be real barriers to communication and trade with neighboring countries. These type of border conditions have adversely

affected the structure and performance of the economy and its prospects for convergence. This paper examines the post-1989 developments in the Balkan region from a Greek perspective. Growth rates, development levels, economic structures, trade relations, factor movements and the spatial structure of the region are examined on a comparative basis, in order to detect major trends and developments that are taking place, as a result of an unprecedented integration-transition process. On the basis of the analysis, it is concluded that Greece can overcome isolation and effectively deal with the pressures and difficulties of European integration, by pursuing a strategy that will gradually recompose the economic space in its vicinity, with the creation of a large and accessible regional Balkan market.

Christoffersen, Peter F.

PD May 1997. **TI** Cointegration and Long-Horizon Forecasting. **AU** Christoffersen, Peter F.; Diebold, Francis X. **AA** Christoffersen: International Monetary Fund. Diebold: University of Pennsylvania. **SR** International Monetary Fund Working Paper: WP/97/61; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** C32, C53. **KW** Cointegration. Unit Roots. Forecasting. Loss Functions.

AB Imposing cointegration on a forecasting system, if cointegration is present, is believed to improve long-horizon forecasts. Contrary to this belief, at long horizons nothing is lost by ignoring cointegration when the forecasts are evaluated using standard multivariate forecast accuracy measures. In fact, simple univariate Box-Jenkins forecasts are just as accurate. Our results highlight a potentially important deficiency of standard forecast accuracy measures -- they fail to value the maintenance of cointegrating relationships among variables -- and we suggest alternatives that explicitly do so.

Clarida, Richard

PD May 1996. **TI** How the Bundesbank Conducts Monetary Policy. **AU** Clarida, Richard; Gertler, Mark. **AA** Clarida: Columbia University and National Bureau of Economic Research. Gertler: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5581; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 48. **PR** \$5.00. **JE** E52, E58. **KW** Monetary Policy. Bundesbank. Monetary Targeting.

AB This paper analyzes German monetary policy in the post-Bretton Woods era. Despite the public focus on monetary targeting, in practice, German monetary policy involves the management of short term interest rates, as it does in the United States. Except during the mid to late 1970's, the Bundesbank has aggressively adjusted interest rates to achieve and maintain low inflation. The performance of the real economy, however, also influences its decision-making. Our formal analysis suggests that the Bundesbank has adjusted short term interest rates according to a modified version of the feedback rule that Taylor (1994) has used to characterize the behavior of the Federal Reserve Board under Alan Greenspan.

Clark, Peter B.

PD February 1997. **TI** Phillips Curves, Phillips Lines and the Unemployment Costs of Overheating. **AU** Clark, Peter B.; Laxton, Douglas. **AA** Clark: London School of Economics and International Monetary Fund. Laxton:

International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/17; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 44. **PR** not available. **JE** C51, E24, E31, E52. **KW** Phillips Curve. Unemployment. Monetary Policy.

AB Most empirical work on the U.S. Phillips curve has had a strong tendency to impose global linearity on the data. The basic objective of this paper is to reconsider the issue of nonlinearity and to underscore its importance for policymaking. After briefly reviewing the history of the Phillips curve and the basis for convexity, we derive it explicitly using standard models of wage and price determination. We provide some empirical estimates of Phillips curves and Phillips lines for the United States and use some illustrative simulations to contrast the policy implications of the two models.

Coate, Malcolm B.

PD August 1994. **TI** Merger Analysis in the Courts. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 207; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Room 3110, Washington, D.C. 20580. **PG** 39. **PR** no charge. **JE** K21, L40. **KW** Mergers. Antitrust.

AB This paper presents an analysis of the merger decisions between 1982- 1992. The survey of cases suggests that the plaintiffs win roughly half the time. Plaintiffs were no more likely to win if a case was heard by a judicial panel dominated by Republican than Democratic appointees. In addition, the plaintiffs were no more likely to win in the second half of the decade than in the first half of the period. Further analysis suggests that barriers to entry and various competitive factors supplement the Herfindahl statistic in predicting the outcome of the case. Additional models link barrier and competitive conditions findings to exogenous factors such as the DOJ as a plaintiff and the filing for a preliminary injunction.

PD November 1995. **TI** The Political Economy of Federal Trade Commission Administrative Decision Making in Merger Enforcement. **AU** Coate, Malcolm B.; Kleit, Andrew W. **AA** Coate: Federal Trade Commission. Kleit: Louisiana State University. **SR** Federal Trade Commission Bureau of Economics Working Paper: 210; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Room 3110, Washington, D.C. 20580. **PG** 28. **PR** no charge. **JE** D72, D73, K21, L40. **KW** Antitrust Law. Mergers. Public Choice. Bureaucracy.

AB The Federal Trade Commission (FTC) is charged, along with the Department of Justice (DOJ), with enforcing the antitrust laws. Unlike the DOJ, however, the FTC litigates its cases in front of its own administrative law judges (ALJ's), and then hears the appeal itself. This study focuses on the formal decisions made by the FTC after an ALJ has conducted a full trial for a particular case. We find that while the merits of a matter affect the FTC's decision, internal factors also have an impact. In particular, the number of commissioners who both vote to prosecute and then vote as a judge in a case affects the FTC's decision, as does the political affiliations of the commissioners. Contrary to previous studies by Faith, Levens and Tollison (1982) and Weingast and Moran (1983), however, little evidence is found of external politics affecting FTC judicial decisions.

Cochrane, John H.

PD March 1996. **TI** Beyond Arbitrage: "Good-Deal" Asset Price Bounds in Incomplete Markets. **AU** Cochrane, John H.; Saa-Requejo, Jesus. **AA** Cochrane: University of Chicago and National Bureau of Economic Research. Saa-Requejo: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 5489; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 51. **PR** \$5.00. **JE** G12, G13. **KW** Asset Pricing. Price Bounds. Options Pricing. Black-Scholes Model. Sharpe Ratio.

AB It is often useful to price assets and other random payoffs by reference to other observed prices rather than construct full-fledged economic asset pricing models. This approach breaks down if one cannot find a perfect replicating portfolio. We impose weak economic restrictions to derive useful tight bounds on asset prices in this situation. The bounds basically rule out high Sharpe ratios-"good deals"-as well as arbitrage opportunities. We present the method of calculation, we extend it to a multiperiod context by finding a recursive solution, and we apply it to option pricing examples including the Black-Scholes setup with infrequent trading, and a model with stochastic stock volatility and a varying riskfree rate.

Coe, David T.

PD February 1997. **TI** Policy Complementarities: The Case for Fundamental Labour Market Reform. **AU** Coe, David T.; Snower, Dennis J. **AA** Coe: International Monetary Fund. Snower: Birkbeck College. **SR** Centre for Economic Policy Research Discussion Paper: 1585; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 52. **PR** 4 pounds or \$8.00. **JE** E61, H25, J20, J30, J41, J60. **KW** Policy Complementarities. Unemployment Benefits. Job Security. Payroll Taxes. Wage Bargaining. Labor Mobility.

AB The paper analyzes complementarities among a variety of labor market policies. It shows: (a) that a wide range of labor market institutions (e.g. unemployment benefits, job security legislation and payroll taxes) have complementary effects on unemployment; and thus (b) that policies aimed at reforming these institutions are also complementary. These policy complementarities imply that partial labor market reform (directed at one institution, while leaving the other institutions in place) is unlikely to achieve significant reductions in unemployment. Rather, labor market reform becomes particularly effective only once a broad range of institutional rigidities are dismantled simultaneously and the distributional objectives of the previous policies are pursued through more efficient means.

Cole, Harold L.

PD March 1996. **TI** Reputation Spillover Across Relationships: Reviving Reputation Models of Debt. **AU** Cole, Harold L.; Kehoe, Patrick J. **AA** Cole: Federal Reserve Bank of Minneapolis. Kehoe: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5486; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** F34, H63. **KW** Reputation Spillover. Reputation Models. Debt.

AB A traditional explanation for why sovereign governments repay debts is that they want to keep good reputations so they

can easily borrow more. Bulow and Rogoff show that this argument is invalid under two conditions: (i) there is a single debt relationship, and (ii) regardless of their past actions, governments can earn the (possibly state-contingent) market rate of return by saving abroad. Bulow and Rogoff conjecture that, even under condition (ii), in more general reputation models with multiple relationships and spillover across them, reputation may support debt. This paper shows what is needed for this conjecture to be true.

Collins, Grainne

PD January 1997. **TI** Poverty in the U. K. and Hungary: Evidence From Household Budget Surveys. **AU** Collins, Grainne; Redmond, Gerry. **AA** Collins: University of Ulster at Jordanstown. Redmond: University of Cambridge. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9703; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 31. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** D31, I31, I32. **KW** Poverty. United Kingdom. Hungary. Household Budget.

AB In this paper the authors compare two household budget surveys, the 1993 Hungarian Household Budget Survey and the 1993 U. K. Family Expenditure Survey. Using these data the authors derive measures of total household income and expenditure, and calculate poverty headcounts assuming seven different poverty lines. They then examine the socio-economic characteristics that are associated with households falling below these poverty lines. They find that while in the U. K., household size and composition are important determinants of poverty among households with children, in Hungary poverty among families with children is more associated with education of head of household. They also find that among households containing pensioners in both countries, education of head of household is an important determinant of poverty.

Controneo, Jill

TI When is the Standard Analysis of Common Property Extraction Under Free Access Correct? A Game-Theoretic Justification for Non Game-Theoretic Analyses. **AU** Brooks, Robin; Controneo, Jill; Murray, Michael; Salant, Stephen.

Corbel, Patrick

TI The Entry and Exit of Workers and the Growth of Employment: An Analysis of French Establishments. **AU** Abowd, John M.; Corbel, Patrick; Kramarz, Francis.

Corcoran, Mary

TI Sex-Based Differences in School Content and the Male/Female Wage Gap. **AU** Brown, Charles; Corcoran, Mary.

Cordella, Tito

PD August 1997. **TI** Public Disclosure and Bank Failures. **AU** Cordella, Tito; Yeyati, Eduardo Levy. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/96; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 18. **PR** not available. **JE** D82, G14, G21, G28. **KW** Banking Systems. Banking. Bank Failures. Risk Exposure. Public Disclosure.

AB This paper examines how public disclosure of banks' risk

exposure affects banks' risk-taking incentives and assesses how the presence of informed depositors influences the soundness of the banking system. It finds that, when banks have complete control over the volatility of their loan portfolios, public disclosure reduces the probability of banking crises. However, when banks do not control their risk exposure, the presence of informed depositors may increase the probability of bank failures.

Crowley, Joe

PD April 1997. **TI** The Effects of Forward- versus Backward-Looking Wage Indexation on Price Stabilization Programs. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/38; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 21. **PR** not available. **JE** E24, E31, J41, O54. **KW** Wages. Wage Indexation. Contracts. Inflation. Price Stabilization.

AB A standard open-economy model is used to show that price stabilization programs are more likely to succeed if labor contracts specify forward-looking wage indexation. Compared with contracts specifying backward-looking wage indexation or wages based on static expectations, such contracts will result in a greater reduction in inflation with lower output costs, smaller misalignment of real wages, smaller outflows of reserves, smaller disruptions caused by policy announcements, and a reduced impact of some shocks during price stabilization programs. These results are generally true whether or not capital is mobile and whether or not expectations are rational.

Cullen, Julie

TI Spousal Labor Supply As Insurance: Does Unemployment Insurance Crowd Out the Added Worker Effect? **AU** Gruber, Jonathan; Cullen, Julie.

Cutler, David M.

PD April 1996. **TI** Labor Market Responses to Rising Health Insurance Costs: Evidence on Hours Worked. **AU** Cutler, David M.; Madrian, Brigitte C. **AA** Cutler: Harvard University and National Bureau of Economic Research. Madrian: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5525; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** J23, J32. **KW** Health Insurance. Hours Worked. Nonwage Costs.

AB Increase in the cost of providing health insurance must have some effect on labor markets, either in lower wages, changes in the composition of employment, or both. Despite a presumption that most of this effect will be in the form of lower wages, we document in this paper a significant effect on work hours as well. Using data from the CPS and the SIPP, we show that rising health insurance costs over the 1980's increased the hours worked of those with health insurance by up to 3 percent. We argue that this occurs because health insurance is a fixed cost, and as it becomes more expensive to provide, firms face an incentive to substitute hours per worker for the number of workers employed.

PD May 1996. **TI** Public Policy for Health Care. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5591; National Bureau of Economic Research,

1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 36. **PR** \$5.00. **JE** D81, H21, H23, H51, I18. **KW** Health Care. Insurance. Medical Care. Public Policy. Redistribution.

AB This paper reviews the public sector role in the provision of health care. A first role of the government is to use tax policy to correct externalities associated with individual behaviors. Estimates suggest that the external effects of many "sins" such as alcohol consumption are greater than current taxes on these goods. A second role of the government is to correct distortions in markets for medical care and health insurance. Markets for health insurance have traditionally not offered a choice between cost and the generosity of benefits. As a result, there have been incentives for excessive technological development, particularly technologies that increase spending. Once technologies have diffused widely, they are overutilized. Policies to increase choice in insurance markets could increase welfare, provided they limit segmentation on the basis of risk.

Daniel, James

PD April 1997. **TI** Fiscal Aspects of Bank Restructuring. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/52; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** E62, G21, G28. **KW** Fiscal Policy. Banks. Public Expenditures. Restructuring. Debt Sustainability.

AB Governments frequently assist troubled banks. This paper examines the fiscal aspects of such assistance: rationale, design criteria, methods, and macroeconomic implications. It concludes that (1) banks should be assisted only when there is a clear systemic risk; (2) assistance should be tied to a comprehensive restructuring program, minimize fiscal cost, be equitable and transparent, prevent recurrence, and facilitate a sound macroeconomic environment; (3) debt-based assistance will worsen public sector debt sustainability and will probably increase aggregate demand; and (4) assistance may require a substantial fiscal response (especially given the possible need for a looser monetary stance), which should feed iteratively into the choice of restructuring strategy.

Daniel, Kent

PD June 1996. **TI** Evidence on the Characteristics of Cross Sectional Variation in Stock Returns. **AU** Daniel, Kent; Titman, Sheridan. **AA** Daniel: University of Chicago. Titman: Boston College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5604; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** D21, D40, G12. **KW** Stock Returns. Risk. Finance. Diversifiability. Factor Risk.

AB Firm size and book-to-market ratios are both highly correlated with the returns of common stocks. Fama and French (1993) have argued that the association between these firms' characteristics and their stock returns arises because size and book-to-market ratios are proxies for non-diversifiable factor risk. In contrast, the evidence in this paper indicates that the return premia on small capitalization and high book-to-market stocks does not arise because of the co-movements of these stocks with pervasive factors. It is the firm characteristics and not the covariance structure of returns that explain the cross-sectional variation in stock returns.

Darby, Michael R.

TI Costly Information in Firm Transformation, Exit, or Persistent Failure. **AU** Zucker, Lynne G.; Darby, Michael R.

Dasgupta, Sudipto

PD March 1996. **TI** Pricing Strategy and Financial Policy. **AU** Dasgupta, Sudipto; Titman, Sheridan. **AA** Dasgupta: HKUST. Titman: Boston College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5498; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** G32, G34. **KW** Pricing Strategies. Leveraged Buyout. Market Share. Predatory Pricing.

AB Recent empirical evidence indicates that capital structure changes affect pricing strategies. In most cases, prices increase following the implementation of a leveraged buyout of a major firm in an industry, with the more levered firm charging higher prices on average. Notable exceptions exist when rival firms are relatively unlevered. The first observation is consistent with a relatively simple model where firms compete for market share on the basis of price. To explain the second observations (i.e. the exceptions) the model must be extended to allow for reputation effects related to product quality. The extended model illustrates how product market imperfections in combination with high leverage can make firms vulnerable to predatory pricing.

Davidson, Russell

PD February 1996. **TI** The Size and Power of Bootstrap Tests. **AU** Davidson, Russell; MacKinnon, James G. **AA** Davidson: Queen's University. MacKinnon: GREQAM and Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 932; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 28. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** C12, C14, C15, C40. **KW** Bootstrapping. Hypothesis Testing. Non-nested Hypothesis. P Values. Serial Correlation.

AB Bootstrap tests are tests for which the significance level is calculated by some sort of bootstrap procedure, which may be parametric or nonparametric. The authors show that the size distortion of a bootstrap P value for a test will be one whole order of magnitude smaller than that of the corresponding asymptotic P value. The authors also show that, at least in the parametric case, the magnitude of the distortion will depend on the shape of what they call the P value function. As regards the power of bootstrap tests, the authors show that the size-corrected power of a bootstrap test differs from that of the corresponding asymptotic test only by an amount of the same order of magnitude as the size. Monte Carlo results are presented for two cases of interest: tests for serial correlation and nonnested hypothesis tests, which confirm and illustrate the utility of the authors' theoretical results.

PD August 1996. **TI** The Size Distortion of Bootstrap Tests. **AU** Davidson, Russell; MacKinnon, James G. **AA** Davidson: Queen's University. MacKinnon: GREQAM and Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 936; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 20. **PR** \$3.21

Canada; \$3.50 U.S. and Foreign. **JE** C12, C15, C52. **KW** Bootstrapping. Hypothesis Testing. Size Distortion. Hypothesis Tests. P Values.

AB Bootstrap tests are tests for which the significance level is calculated by some sort of bootstrap procedure, which may be parametric or nonparametric. We provide a theoretical framework in which to study the size distortions of bootstrap P values. We show that, in many circumstances, the size distortion of a bootstrap test will be one whole order of magnitude smaller than that of the corresponding asymptotic test. We also show that, at least in the parametric case, the magnitude of the distortion will depend on the shape of what we call the P value function. Monte Carlo results are presented for the case of nonnested hypothesis tests. These results confirm and illustrate the utility of our theoretical results, and they also suggest that bootstrap tests may often work extremely well in practice.

PD September 1996. **TI** The Power of Bootstrap Tests. **AU** Davidson, Russell; MacKinnon, James G. **AA** Davidson: Queen's University. MacKinnon: GREQAM and Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 937; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 16. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** C12, C15, C52. **KW** Bootstrapping. Hypothesis Testing. Logit Model. Power. **AB** Bootstrap tests are tests for which the significance level is calculated using some variant of the bootstrap, which may be parametric or nonparametric. We show that the power of a bootstrap test will generally be very close to the power of the asymptotic test on which it is based, provided that both tests are properly adjusted to have the correct size. We also discuss the loss of power that can occur when the number of bootstrap samples is relatively small. Some Monte Carlo results for two forms of omitted variable test in logit models are presented. These illustrate the theoretical results of the paper and demonstrate that the size-adjusted power of asymptotic tests can vary greatly depending on the method used for size adjustment.

PD January 1997. **TI** Bootstrap Testing in Nonlinear Models. **AU** Davidson, Russell; MacKinnon, James G. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 944; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 17. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** C12, C15, C52. **KW** Bootstrapping. Hypothesis Testing. Tobit Model. One-Step Estimation.

AB When a model is nonlinear, bootstrap testing can be expensive because of the need to perform at least one nonlinear estimation for every bootstrap sample. We show that it may be possible to reduce computational costs by performing only a fixed, small number of artificial regressions, or Newton steps, for each bootstrap sample. The number of iterations needed is smaller for likelihood ratio tests than for other types of classical tests. The suggested procedures are applied to tests of slope coefficients in the tobit model, where asymptotic procedures often work surprisingly poorly. In contrast, bootstrap tests work remarkably well, and very few iterations are needed to compute them.

Davis, Donald

PD June 1996. **TI** Does European Unemployment Prop Up American Wages? **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5620; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** F10, F22, F41, J61, J64. **KW** Unemployment. Europe. Labor Markets. Immigration. Wages.

AB We consider trade between a flexible wage America and a rigid real wage Europe. In a benchmark case, a move from autarky to free trade doubles the European unemployment rate, while it raises the American unskilled wage to the high European level. Entry of the unskilled "South" to world markets raises unemployment in Europe. But Europe's commitments to the high wage completely insulates America from the shock. Immigration to America raises American income, but lowers European income dollar-for-dollar, while European unemployment rises one-for-one. We consider a stylized game of the choice of factor market institutions. Mitterrand's Europe chooses a high minimum wage and Reagan's America chooses a flexible wage for the unskilled. Paradoxically, unskilled workers are worse off in Europe. Trade equalizes wages, but Europeans bear all of the unemployment required to sustain the high wage.

De Arcangelis, Giuseppe

PD October 1995. **TI** Collapses of Fixed Exchange-Rate Regimes as Breakdown in Cooperation: the EMS in 1992-1993 and the Transition to EMU. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/04; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 41. **PR** \$4.00; payable to the Department of Economics. **JE** F31, F33, F41, F42. **KW** Exchange Rates. Monetary Policy. European Monetary System. Optimal Stopping.

AB In this paper the collapse of a bilateral fixed exchange-rate regime is described as the optimizing decision of the two countries' monetary authorities on when to break down the cooperative exchange-rate agreement. In particular, the two countries experience a trade-off between (a) fixing the nominal exchange rate, and (b) letting the nominal exchange rate freely fluctuate so as to isolate the countries from asymmetric shocks on nominal variables. The paper derives the optimal exit decision in a stochastic framework when there are exogenous and irreversible benefits from the fixed exchange-rate regime. As a result, the agreement tends to last longer than it would in a deterministic framework even though big asymmetric shocks hit the two countries. This could well describe why the exchange-rate arrangement among the European countries lasted so long with no realignments after 1987.

De Grauwe, Paul

PD April 1997. **TI** Setting Conversion Rates for the Third Stage of EMU. **AU** De Grauwe, Paul; Spaventa, Luigi. **AA** De Grauwe: Katholieke Universiteit Leuven. Spaventa: Universita degli studi di Roma. **SR** Centre for Economic Policy Research Discussion Paper: 1638; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 14. **PR** 4 pounds or \$8.00. **JE** F33, F36, F42. **KW** Monetary Integration. Maastricht Treaty. Exchange Rate.

AB This paper analyzes the constraints on the choice of the conversion rates resulting from the fact that the external value of the Ecu cannot be changed at the start of the third stage of EMU and that one Ecu must be converted into one Euro. These constraints force the authorities to accept the market rates of 31 December 1998 when setting the conversion rates. We propose that the participants should agree on a set of bilateral conversion rates in advance and that they should steer market rates towards these agreed upon bilateral conversion rates.

PD May 1997. **TI** Exchange Rate Arrangements Between the Ins and the Outs. **AA** Katholieke Universiteit Leuven. **SR** Centre for Economic Policy Research Discussion Paper: 1640; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 25. **PR** 4 pounds or \$8.00. **JE** F33, F36, F42. **KW** Monetary Integration. Maastricht Treaty. Exchange Rate. **AB** This paper analyses several issues. First, it describes the main features of ERM II and compares them with those of ERM I as it evolved during the 1980's and 1990's. Second, it analyzes whether, and under what conditions, ERM II will be more successful than its predecessor in avoiding disruptive speculative crises. To do so, it uses both new theoretical insights about the factors that affect the occurrence of speculative crises and an historical analysis of the turbulence within ERM I.

de Long, J. Bradford

PD June 1996. **TI** Keynesianism, Pennsylvania Avenue Style: Some Economic Consequences of the Employment Act of 1946. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5611; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** E12, H10, N10, N30. **KW** Employment Act of 1946. Keynesian Economics. Economic Advisors Council.

AB The Employment Act of 1946 created the Council of Economic Advisors as an institution, and serves as a convenient marker of a broader change in opinions and sentiments: the assumption by the federal government of the role of stabilizing the macroeconomy. The magnitude of this shift should not be understated: before the Great Depression strong currents of macroeconomic theory held that stabilization policy was positively unwise. Yet as a result of the shift in opinions and sentiments marked by the 1946 Employment Act, no government since WWII has dared do anything other than let fiscal automatic stabilizers swing into action during recession. But the bulk of the CEA's time and energy now and in the past has been devoted not to macroeconomic but to microeconomic issues. The CEA has been one of the few advocates of the public interest in allocative efficiency present in the government.

de Melo, Jaime

TI Lobbying and the Structure of Protection. **AU** Cadot, Olivier; de Melo, Jaime; Olarreaga, Marcelo.

De Nicolò, Gianni

TI Stock Returns, Term Structure, Inflation and Real Activity: An International Perspective. **AU** Canova, Fabio; De Nicolò, Gianni.

Deardorff, Alan V.

PD October 1995. **TI** Determinants of Bilateral Trade: Does Gravity Work in a Neoclassical World? **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/05; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 30. **PR** \$4.00; payable to the Department of Economics. **JE** F11. **KW** Bilateral Trade. Gravity Equation.

AB This paper derives equations for the value of bilateral trade from two extreme cases of the Heckscher-Ohlin Model. The first case is free trade, in which producers and consumers are indifferent among trading partners. Resolving this indifference randomly, expected trade flows correspond exactly to the simple frictionless gravity equation if preferences are identical and homothetic or if demands are uncorrelated with supplies. The second case is of countries that each produce distinct goods as in the H-O Model with complete specialization. Expressions are derived for bilateral trade. The standard gravity equation with trade declining in distance continues to be a central tendency for these trade flows. The paper concludes that even simple forms of the gravity equation can be justified from standard trade theories and that using the gravity equation for empirical tests is suspect.

Deaton, Angus

PD May 1996. **TI** Parametric and Non-Parametric Approaches to Price and Tax Reform. **AU** Deaton, Angus; Ng, Serena. **AA** Deaton: Princeton University and National Bureau of Economic Research. Ng: University of Montreal. **SR** National Bureau of Economic Research Working Paper: 5564; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** C14, H21. **KW** Tax Reform. Price Reform. Pakistan.

AB In the analysis of tax reform, when equity is traded off against efficiency, the measurement of the latter requires us to know how tax-induced price changes affect quantities supplied and demanded. In this paper, we present various econometric procedures for estimating how taxes affect demand. We examine advantages and disadvantages of parametric methods of tax reform analysis and suggest that the nonparametric "average derivate estimator" is a useful alternative. We apply both parametric and nonparametric methods to analyze possible price reform for foods in rural Pakistan, and discuss the issues that remain to be dealt with in empirical welfare analyses.

TI Large Cash Transfers to the Elderly in South Africa. **AU** Case, Anne; Deaton, Angus.

Debelle, Guy

PD March 1997. **TI** Inflation Targeting in Practice. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/35; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** E31, E52, E58, E61. **KW** Inflation Targeting. Monetary Policy. Central Banks.

AB In recent years, an inflation targeting framework for monetary policy has been adopted in a number of industrial countries. This paper discusses the practical issues that have arisen under the operation of the new framework, and highlights five features of the framework: the assignment of the target, the interaction with other policy goals, the definition of the target, accountability and the role of inflation forecasts. The

economic performance of the inflation targeting countries thus far is summarized.

Degryse, Hans

PD February 1997. **TI** The Total Cost of Trading Belgian Shares: Brussels versus London. **AA** CentRE and Tilburg University. **SR** Centre for Economic Policy Research Discussion Paper: 1581; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 40. **PR** 4 pounds or \$8.00. **JE** G15. **KW** Trading Shares. Brussels Stock Exchange. SEAQ International. Belgian Equities.

AB Since 1990, London's SEAQ International attracts considerable trading volume in Belgian equities. This paper uses transaction, quotation and limit order book data to investigate competition between the Brussels CATS market and SEAQ International. It focuses in more detail on the liquidity (indirect costs) measured by the quoted and effective bid-ask spread. CATS outweighs SEAQI for both measures. The effective spread is substantially smaller than the quoted spread. The CATS effective spread shows a U-shaped form. This is in line with the different market micro-structure models. Total trading costs on CATS are lower (higher) for small (large) trade sizes.

TI Attribute Dependence and the Provision of Quality. **AU** Irmen, Andreas; Degryse, Hans.

Dehejia, Vivek H.

PD April 1997. **TI** Optimal Restructuring Under a Political Constraint: A General Equilibrium Approach. **AA** Carleton University. **SR** Centre for Economic Policy Research Discussion Paper: 1619; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 10. **PR** 4 pounds or \$8.00. **JE** F11, F13. **KW** General Equilibrium. Political Economy. Second-Best Theory. Shock Therapy. Structural Adjustment. Transition Economies.

AB This paper considers the generalized second-best analytics of optimal restructuring under a political constraint, building on the modeling approach in Dehejia (1997). It is shown that the second-best optimum entails administering the terms-of-trade shock fully at the initiation of the reform, just as in shock therapy, but that this must be supplemented with interventions in domestic factor markets. The effects of these interventions are to speed up the exit of the politically affected factor, labor, and to retard the exit of the other factor, capital, both of which serve to prop-up the wages of workers in the declining sector and hence address the political constraint. The results are in the spirit of the neoclassical theory of distortions and welfare: the optimal intervention targets the affected margin directly, in consonance with the "targeting" principle of Bhagwati-Ramaswami-Johnson.

Dekle, Robert

PD March 1997. **TI** Financial Liberalization and Money Demand in ASEAN Countries: Implications for Monetary Policy. **AU** Dekle, Robert; Pradhan, Mahmood. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/36; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 20. **PR** not available. **JE** D92, E31, E51, E52, E58. **KW** Financial Markets. Money Demand. Monetary Policy. Cointegration. ASEAN.

AB This paper examines the impact of financial market development and liberalization on money demand behavior in Indonesia, Malaysia, Singapore, and Thailand since the early 1980's. The empirical results indicate continuing instability in the interaction of money growth, economic activity, and inflation. Rapid growth and ongoing changes in financial markets suggest that policy needs to be guided by a wider set of monetary and real sector indicators of inflationary pressures. The feasibility of alternative policy frameworks, including nominal exchange rate targets and inflation targets, is discussed in the context of the substantial and sustained increase in foreign capital inflows.

den Haan, Wouter J.

PD April 1996. **TI** The Comovements Between Real Activity and Prices at Different Business Cycle Frequencies. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5553; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 32. **PR** \$5.00. **JE** E24, E31, E32. **KW** Comovements. Prices. Hours.

AB In this paper, two different methods are presented that can be used to obtain a concise set of descriptive results about the comovement of variables. The statistics are easy to interpret and capture important information about the dynamics in the system that would be lost if one focused only on the unconditional correlation coefficient of trended data. The methods do not require assumptions about the order of integration. That is, the methods can be used for stationary as well as integrated processes. They do not require the types of assumptions needed for VAR decompositions either. Both methods give similar results. In the postwar period, the comovement between output and prices is positive in the "short run" and negative in the "long run." During the same period, the comovement between hours and real wages is negative in the "short run" and positive in the "long run." I show that a model in which demand shocks dominate in the short run and supply shocks dominate in the long run can explain the empirical results, while standard sticky-price models with only demand shocks cannot.

Desruelle, Dominique

TI A Primer on the IMF's Information Notice System. **AU** Zanello, Alessandro; Desruelle, Dominique.

Detragiache, Enrica

TI Multiple Versus Single Banking Relationships. **AU** Guiso, Luigi; Detragiache, Enrica; Garella, Paolo G.

PD June 1997. **TI** Exchange Rate-Based Stabilization in Western Europe: Greece, Ireland, Italy and Portugal. **AU** Detragiache, Enrica; Hamann, Alfonso J. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/75; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 26. **PR** not available. **JE** E31, E64, F31, F32, F41. **KW** Inflation Stabilization. Western Europe. Exchange Rates. Developing Countries. Current Account.

AB This paper compares the experience with exchange-rate based stabilization (ERBS) of four Western European countries with that of high-inflation developing countries. In general, the behavior of key macroeconomic variables -- inflation, output, demand, the real exchange rate and the current account -- in the

four countries examined did not correspond to the pattern observed in developing countries, although some resemblance to this pattern could be found in Italy in 1987-92 and Greece in 1994-96. The experience with ERBS in Western Europe highlights the importance of incomes policy as an ingredient of a successful stabilization program and shows that the adoption of a looser anchor does not necessarily reduce the output cost of disinflation.

Dhonte, Pierre

PD December 1996. **TI** Towards a Market Economy: Structures of Governance. **AU** Dhonte, Pierre; Kapur, Ishan. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/11; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 13. **PR** not available. **JE** D78, E61, H11, L10, P11. **KW** Market Economy. Government Structure. Economic Transition. Sustainable Growth.

AB This paper proposes an operational interpretation of the concept of economic governance. It argues that the capacity of governments to credibly ensure a secure economic environment provides an important benchmark against which governance can be evaluated. Such an environment, which is essential for sustained growth in a market economy, can be established through a rules-based system which ensures freedom of entry into the market, access to information, and sanctity of contracts. Since creating a secure economic environment involves profound, far-reaching social change, it has historically been a complex and lengthy process in most societies. However, basing policy prescriptions on this benchmark helps avoid possible conflicts between different social and moral values.

Diebold, Francis X.

TI Bounded Rationality and Strategic Complementarity in a Macroeconomic Model: Policy Effects, Persistence and Multipliers. **AU** Bomfim, Antulio N.; Diebold, Francis X.

TI Cointegration and Long-Horizon Forecasting. **AU** Christoffersen, Peter F.; Diebold, Francis X.

Diewert, W. Erwin

PD May 1996. **TI** Axiomatic and Economic Approaches to International Comparisons. **AA** University of British Columbia and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5559; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 40. **PR** \$5.00. **JE** C43, E31. **KW** Index Numbers. Multilateral Index. International Comparisons.

AB The paper considers the problem of choosing a multilateral system of index numbers in order to make aggregate price and quantity comparisons between many countries and regions. The problems involved in choosing functional forms in order to make these comparisons are both theoretically and empirically more difficult than the problems involved in choosing a bilateral index number formula. The great variation in relative prices and quantities in the international context means that the choice of a multilateral method is empirically important: different methods will give very different answers. The paper reviews ten classes of multilateral methods both from the viewpoint of the axiomatic approach as well as the economic approach. A new system of 11 desirable axioms or properties for multilateral systems is

suggested. With respect to the economic approach, the concept of a superlative bilateral index number formula (which can adequately model substitution effects) is adapted to the multilateral context. Each of the 10 classes of multilateral methods is evaluated from the axiomatic and economic perspectives. Four classes of methods are identified as being "best". They are all superlative and satisfy slightly different sets of axioms.

Dimaranan, Betina

TI Economic Growth and Policy Reform in the APEC Region: Trade and Welfare Implications by 2005. **AU** Anderson, Kym; Martin, Will; Hertel, Tom; Dimaranan, Betina.

DiNardo, John

PD June 1996. **TI** The Returns to Computer Use Revisited: Have Pencils Changed the Wage Structure Too? **AU** DiNardo, John; Pischke, Jorn-Steffen. **AA** DiNardo: University of California, Irvine. Pischke: Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5606; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** J24, J31. **KW** Wage Differentials. Computers. Germany. Human Capital. Productivity.

AB Are the large measured wage differentials associated with on-the-job computer use productivity gains or the result of unobserved heterogeneity? We examine this issue with three large cross-sectional surveys from Germany. First, we confirm that the estimated wage differentials associated with computer use in Germany are very similar to the U.S. differential. Second, using the same techniques we also measure large differentials for on-the-job use of calculators, telephones, pens or pencils, or for those who work while sitting down. Along with our reanalysis of the U.S. data these findings cast some doubt on the interpretation of the computer-use wage differential as reflecting productivity effects arising from the introduction of computers in the workplace.

Dixon, Huw David

PD January 1997. **TI** Industrial Structure, Menu Costs and the Non-Neutrality of Money. **AU** Dixon, Huw David; Hansen, Claus Thustrup. **AA** Dixon: University of York. Hansen: University of Copenhagen. **SR** Centre for Economic Policy Research Discussion Paper: 1567; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 17. **PR** 4 pounds or \$8.00. **JE** D40, E30, L16. **KW** New Keynesian Economics. Industrial Structure.

AB New Keynesian literature assumes symmetric industrial structure when analyzing explanations of monetary non-neutrality. We analyze the impact of modifying this assumption by allowing for a mixed industrial structure; some industries are characterized by monopolistic competition, and others by perfect competition. The mixed industrial structure implies that there is a misallocation of the input (labor) between sectors. Following a 5% monetary expansion, the menu costs required for price rigidity in the monopolistic sector can be 50 times smaller than in the symmetric case, while the ratio of welfare gain to private loss can be as large as 200 times the corresponding symmetric case. This implies that in real world

economies, menu costs may be even more significant than previously thought.

Dorland, John

TI Standard Mortality Ratios in Capitation Funding Models: Empirical Issues From Canadian Data. **AU** Bedard, Kelly; Dorland, John; Gregory, Allan W.; Rosenberg, Mark.

Dornbusch, Rudi

PD May 1996. **TI** Debt and Monetary Policy: The Policy Issues. **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5573; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** E52, H63. **KW** Debt. Monetary Policy.

AB The paper explores the implications of high debt for monetary policy. In Europe, debt (and deficits) play a special role at present in the run up of Maastricht because large debts are seen as a threat to the integrity of the new European money. The paper reviews two historical episodes -- the German, UK, and French experience in the 1920's and the US debt liquidation of the 1950-1980 period. The theoretical review focuses on hypotheses of Keynes, Clark and Sargent-Wallace. The paper adds to the range of concerns private balance sheet vulnerability.

Driffill, John

PD May 1997. **TI** Real Interest Rates, Nominal Shocks, and Real Shocks. **AU** Driffill, John; Snell, Andrew. **AA** Driffill: University of Southampton. Snell: University of Edinburgh. **SR** Centre for Economic Policy Research Discussion Paper: 1647; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 19. **PR** 4 pounds or \$8.00. **JE** C32, E43. **KW** Interest Rates. Structural VAR's. Real Shocks. Nominal Shocks.

AB This paper uses a structural time-series analysis to analyze the properties of ex-ante real interest rates of the five major OECD economies in relation to temporary and permanent shocks to real output. Following Blanchard and Quah (1989) we refer to these innovations as "nominal" and "real" shocks respectively. The relationships of rates to these shocks appear to be qualitatively consistent with predictions of stochastic general equilibrium models of business cycles driven by both real and nominal disturbances. Real and nominal shocks originating in the United States are found to be the most important causes of persistence in ex-ante real interest rates, but of the two, only nominal shocks cause dynamic movements in rates that are coherent across all countries. Further results indicate that the rise in real interest rates experienced by these countries in the early 1980's was mainly due to nominal shocks in all five countries; real shocks played little or no role.

Drummond, Paulo

PD March 1997. **TI** Recent Export Credit Market Developments. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/27; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 16. **PR** not available. **JE** F13, F34, H87, O16, O19. **KW** Export Credit. Developing Countries. International Finance. Investment Insurance.

AB Export credit agencies (ECA's) have played a critical role

in financing for developing countries in recent years, and officially supported export credits have been growing in volume. The current export credit exposure to developing countries and economies in transition has reached almost half a trillion dollars. This paper reviews developments in export credit markets affecting exposure, new commitments, and cover policy for developing countries and economies in transition and discusses three key issues affecting export credit markets: a more widespread involvement of ECA's in project financing transactions, a strong presence of ECA's in the market for investment insurance, and a deepening of the forfeiting market.

Dumas, Bernard

PD March 1996. **TI** Implied Volatility Functions: Empirical Tests. **AU** Dumas, Bernard; Fleming, Jeff; Whaley, Robert E. **AA** Dumas: H.E.C. School of Management and National Bureau of Economic Research. Fleming: Rice University. Whaley: Duke University. **SR** National Bureau of Economic Research Working Paper: 5500; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** D84, G13. **KW** Implied Volatility. Options Prices. Option Valuation. Deterministic Volatility.

AB Black and Scholes (1973) implied volatilities tend to be systematically related to the option's exercise price and time to expiration. Derman and Kani (1994), Dupire (1994), and Rubinstein (1994) attribute this behavior to the fact that the Black-Scholes constant volatility assumption is violated in practice. These authors hypothesize that the volatility of the underlying asset's return is a deterministic function of the asset price and time and develop the deterministic volatility function (DVF) option valuation model, which has the potential of fitting the observed cross-section of option prices exactly. Using a sample of S&P 500 index options during the period June 1988 through December 1993, we evaluate the predictive and hedging performance of the DV option valuation model. We find that its performance is worse than that of an ad hoc Black-Scholes model with variable implied volatilities.

Ehrenberg, Ronald G.

PD April 1996. **TI** The 1995 NRC Ratings of Doctoral Programs: A Hedonic Model. **AU** Ehrenberg, Ronald G.; Hurst, Peter J. **AA** Ehrenberg: Cornell University and National Bureau of Economic Research. Hurst: Cornell University. **SR** National Bureau of Economic Research Working Paper: 5523; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 10. **PR** \$5.00. **JE** C81, D40, I21. **KW** Program Ranking. Department Rating. Faculty Productivity. Economics Faculty.

AB We describe how one can use multivariate regression models and data collected by the National Research Council as part of its recent ranking of doctoral programs (Research-Doctorate Programs in the United States: Continuity and Change) to analyze how measures of program size, faculty seniority, faculty research productivity, and faculty productivity, in producing doctoral degrees influence subjective ratings of doctoral programs in 35 academic fields. Using data for one of the fields, economics, we illustrate how university administrators can use the models to compute the impact of changing the number of faculty positions they allocate to the field on the ranking of their programs. Finally, we illustrate how administrators can "decompose" the differences between a

department's rating and the ratings of a group of higher ranked departments in the field into difference due to faculty size, faculty seniority, faculty research productivity, and faculty productivity in producing doctoral students. This decomposition suggests the types of questions that a department and a university should be addressing if they are serious about wanting to improve the department's ranking.

TI Does It Pay to Attend an Elite Private College? Cross Cohort Evidence on the Effects of College Quality on Earnings. **AU** Brewer, Domenic; Eide, Eric; Ehrenberg, Ronald G.

Eichenbaum, Martin

TI Expectations Traps and Discretion. **AU** Chari, V. V.; Christiano, Lawrence J.; Eichenbaum, Martin.

Eichengreen, Barry

PD March 1996. **TI** Fiscal Policy and Monetary Union: Is There a Tradeoff Between Federalism and Budgetary Restrictions? **AU** Eichengreen, Barry; von Hagen, Jurgen. **AA** Eichengreen: University of California, Berkeley and National Bureau of Economic Research. Von Hagen: University of Mannheim. **SR** National Bureau of Economic Research Working Paper: 5517; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** \$5.00. **JE** F33, H62, H63, H74, H77. **KW** Maastricht Treaty. Monetary Union. Borrowing Restraints.

AB The Maastricht Treaty on Europe Union features an Excessive Deficit Procedure limiting the freedom to borrow of governments participating in the European monetary union. One justification is to prevent states from over-borrowing and demanding a bailout, which could divert the European Central Bank from its pursuit of price stability. We challenge this rationale. Using data for a cross section of federal states, we show that there is no association between monetary union and restraints on borrowing by subcentral governments. There is, however, an association between fiscal restraints and the share of the tax base under the control of sub-national authorities. Restraints are prevalent where subcentral governments finance a relatively small share of spending with their own taxes. Lacking control of the tax base, such governments cannot be expected to resort to increased taxation to deal with debt crises. Prohibiting borrowing by subcentral governments will not eliminate the demand for tax smoothing and public investment. Governments whose ability to provide such services is limited may therefore pressure the central government to borrow for them. We report evidence that the financial position of central governments is more fragile where subcentral jurisdictions are prevented from borrowing.

PD May 1996. **TI** The Role of History in Bilateral Trade Flows. **AU** Eichengreen, Barry; Irwin, Douglas A. **AA** Eichengreen: University of California, Berkeley and National Bureau of Economic Research. Irwin: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5565; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 38. **PR** \$5.00. **JE** F11, F15. **KW** Bilateral Trade. Gravity Model. Historical Factors.

AB This paper investigates the theory and evidence that history plays a role in shaping the direction of international trade. Because there are reasons to anticipate a positive

correlation between the predominant direction of trade flows in the past and membership in preferential arrangements in the present, there may be a tendency to spuriously attribute to preferential arrangements the effects of historical factors and to exaggerate the influence of the former. Thus, the standard gravity-model formulation, which neglects the role of historical factors, suffers from omitted-variables bias. We illustrate these points by analyzing the evolution of trade between 1949 and 1964. We find that historical factors exercise an important influence on trade even after controlling for the arguments of the standard gravity model.

PD May 1997. **TI** How Will Transatlantic Policy Interactions Change with the Advent of EMU? **AU** Eichengreen, Barry; Ghironi, Fabio. **AA** University of California, Berkeley. **SR** Centre for Economic Policy Research Discussion Paper: 1643; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 34. **PR** 4 pounds or \$8.00. **JE** E50, F30, H30. **KW** European Monetary Unification. Exchange-Rate Regimes. Fiscal Policy. International Cooperation.

AB This paper analyzes U.S.-European policy interactions under different assumptions about the policy-making regime and the nature of the fiscal environment, contrasting the standard Keynesian case with an anti-Keynesian case in which government spending cuts are expansionary. When fiscal policy is anti-Keynesian, EMU may enhance monetary and fiscal discipline in Europe and stabilize employment in the face of supply shocks, in striking contrast to popular fears. The European Central Bank (ECB) and central banks outside Europe will have little incentive to coordinate their response to such shocks. Governments (the fiscal authorities) will wish central banks to coordinate, but the latter will not share their interest. We show that fiscal coordination can be counterproductive in this setting. Governments and central banks on both sides of the Atlantic are worse off when European governments cooperate. The results for the Keynesian case are different: EMU may reduce monetary discipline, the ECB and central banks outside Europe will wish to coordinate their response to supply shocks, and the ECB will want European governments to coordinate their policies.

Eide, Eric

TI Does It Pay to Attend an Elite Private College? Cross Cohort Evidence on the Effects of College Quality on Earnings. **AU** Brewer, Domenic; Eide, Eric; Ehrenberg, Ronald G.

Eken, Sena

PD August 1997. **TI** Fiscal Policy and Growth in the Middle East and North Africa Region. **AU** Eken, Sena; Helbling, Thomas; Mazarei, Adnan. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/101; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 43. **PR** not available. **JE** E62, H61, H62, N15, O53. **KW** Fiscal Policy. Growth. Middle East. North Africa. Fiscal Reform.

AB Establishing a policy framework to sustain high rates of growth is a major challenge facing the economies of the Middle East and North Africa. Given the strikingly dominant role of governments in these economies, this paper focuses on the contribution of fiscal consolidation and reform toward addressing this challenge. On the basis of an examination of fiscal structures, reform and adjustment efforts, and their growth

implications during 1980-95, it concludes that the ongoing process of fiscal reform -- aimed at reducing budget deficits, improving the budgetary structure, and enhancing the effectiveness of government interventions-- is key to ensuring macroeconomic stability and fostering growth.

Ekholm, Karolina

TI Agglomeration in a Core-Periphery Model with Vertically and Horizontally Integrated Firms. **AU** Forslid, Rikard; Ekholm, Karolina.

El-Erian, Mohamed

TI Growth, Investment, and Saving in the Arab Economies. **AU** Bisat, Amer; El-Erian, Mohamed; Helbling, Thomas.

Elias, Peter

TI Modelling Work-Related Training and Training Effects Using Count Data Techniques. **AU** Booth, Alison L.; Arulampalam, Wiji; Elias, Peter.

Emons, Winand

PD May 1997. **TI** Imperfect Tests and Natural Insurance Monopolies. **AA** Universitat Bern. **SR** Centre for Economic Policy Research Discussion Paper: 1644; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 17. **PR** 4 pounds or \$8.00. **JE** D42, D43, L12, L13. **KW** Insurance. Imperfect Tests. Natural Monopoly. Sustainability. Inefficient Entry.

AB This paper considers a housing insurance market in which buildings have different damage probabilities. Insurers use imperfect tests to find out about buildings' damage types. The insurance market is a natural monopoly. If more than one insurer is active, high risk house owners continue to apply to insurers until they are eventually assigned to a low-risk class. First we show that the natural insurance monopoly need not be sustainable. Then we show that in the equilibrium industry structure the incumbent may accommodate entry even when the natural monopoly is sustainable. The theoretical findings are thus able to explain recent observations from Germany and Switzerland where housing insurance damage rates and prices went up drastically after the transition from state monopolies to competitive environments.

Enders, Klaus

TI Financial Sector Reforms in Algeria, Morocco, and Tunisia: A Preliminary Assessment. **AU** Jbili, Abdelali; Enders, Klaus; Treichel, Volker.

Erbas, S. Nuri

TI External Stability Under Alternative Nominal Exchange Rate Anchors: An Application to the GCC Countries. **AU** Iqbal, Zubair; Erbas, S. Nuri.

Erickson, Timothy

TI New Results on Signing Coefficients in Regressions Containing a Proxy. **AU** Whited, Toni M.; Erickson, Timothy.

Ermisch, John F.

PD February 1997. **TI** Family Matters. **AU** Ermisch, John F.; Francesconi, Marco. **AA** University of Essex.

SR Centre for Economic Policy Research Discussion Paper: 1591; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 44. **PR** 4 pounds or \$8.00. **JE** I20, J12, J13. **KW** Intergenerational Processes. Family Structure. Education. Human Capital.

AB The analysis uses a unique set of data matching mothers and their young adult children to study the impact of family background on young people's educational attainments. The data is derived from the first five years (1991-5) of the British Household Panel Study. Mother's education is found to be a very powerful predictor of their children's educational attainments, particularly for young women. Having spent some time in a single-parent family tends to reduce the educational attainment of young men moderately, but the effects on young women's education are small. Part, if not all, of this negative effect of living in a single-parent family reflects fewer economic resources in such families.

Estrin, Saul

PD April 1997. **TI** Convergence in Output in Transition Economies: Central and Eastern Europe, 1970-1995. **AU** Estrin, Saul; Urga, Giovanni. **AA** London Business School. **SR** Centre for Economic Policy Research Discussion Paper: 1616; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 23. **PR** 4 pounds or \$8.00. **JE** C15, C22, C23, O40. **KW** Growth Models. Transition Economies. Unit Roots. Kalman Filter.

AB In this paper we use unit roots/cointegration analysis and time-varying parameters procedures to test for a common growth path in the ex-communist block, both pre- and post-reform. We test whether there has been convergence within the block and between the block as a group and the West. Surprisingly, there is little evidence of convergence within the communist block, which brings into question the effectiveness of policies to reduce differentials in income per capita across the region under the communists. There is also little evidence of convergence with respect to the West, for the 1970-90 period and when the early years of reform are included (1970-95).

Evans, William N.

PD May 1996. **TI** Do Workplace Smoking Bans Reduce Smoking? **AU** Evans, William N.; Farrelly, Matthew C.; Montgomery, Edward. **AA** University of Maryland and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5567; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** \$5.00. **JE** D62, I12. **KW** Smoking Ban. Smoking Prevalence.

AB In recent years there has been a heightened public concern over the potentially harmful effects of environmental tobacco smoke (ETS). In response, smoking has been banned on many jobs. Using data from the 1991 and 1993 National Health Interview Survey and smoking supplements to the September 1992 and May 1993 Current Population Survey, we investigate whether these workplace policies reduce smoking prevalence and smoking intensity among workers. Our estimates suggest that workplace bans reduce smoking prevalence by 5 percentage points and average daily consumption among smokers by 10 percent. The impact of the ban is greatest for those with longer work weeks. Although

workers with better health habits are more likely to work at establishments with workplace smoking bans, estimates from bivariate probit and two-stage least square equations suggest that these estimates are not subject to an omitted variables bias. The rapid increase in workplace bans can explain all of the recent sharp fall in smoking among workers relative to non-workers.

Fabrizio, Stefania

TI How Long is the Long Run? A Dynamic Analysis of the Spanish Business Cycle. **AU** Lopez, Humberto; Fabrizio, Stefania; Ubide, Angel.

Farber, Henry

PD May 1996. **TI** The Changing Face of Job Loss in the United States, 1981-1993. **AA** Princeton University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5596; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 35. **PR** \$5.00. **JE** E24, J23, J64. **KW** Unemployment. Unemployment Demographics. Unemployment Consequences. Job Loss.

AB The author examines changes in the incidence and consequences of job loss by reported cause between 1981 and 1993 using data from Displaced Workers Surveys (DWS). The overall rate of job loss is up somewhat in the 1990's. The increase in job loss is up for older and more educated workers, but younger and less-educated workers continue to have the highest rates of job loss. Some significant changes are also found in the rate of job loss by reported reason. The author also examines the consequences of displacement for several post-displacement labor market outcomes, including the probability of employment, full-time/part-time status, the change in earnings, job stability, and self-employment status. The adverse consequences of job loss, which have always been substantial, do not appear to have changed systematically over time.

Farmer, Roger E.

PD April 1997. **TI** Money in a Real Business Cycle Model. **AA** University of California, Los Angeles. **SR** Centre for Economic Policy Research Discussion Paper: 1630; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 41. **PR** 4 pounds or \$8.00. **JE** E32, E40. **KW** Sunspots. Indeterminacy. Business Fluctuations.

AB This paper constructs a real business cycle model in which real money balances yield utility. We calibrate the model to fit the first moments of U.S. data and simulate a set of impulse response functions that are generated by the model for GDP, the rate of interest, money growth and real balances. These theoretical impulse responses are compared with actual impulse responses from U.S. data. The model does a reasonably good job of capturing the dynamic interactions of money and real variables in U.S. data. It differs from most existing approaches by choosing a parameterization of utility for which the model admits the existence of indeterminate equilibria. It is argued that this fact is critical in explaining the monetary propagation mechanism.

Farrelly, Matthew C.

TI Do Workplace Smoking Bans Reduce Smoking? **AU** Evans, William N.; Farrelly, Matthew C.; Montgomery,

Edward.

Fatas, Antonio

PD January 1997. **TI** EMU: Countries or Regions? Lessons from the EMS Experience. **AA** INSEAD. **SR** Centre for Economic Policy Research Discussion Paper: 1558; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 20. **PR** 4 pounds or \$8.00. **JE** E32, F33, F42. **KW** European Monetary Union. Integration. Regions. **AB** The future adoption of a single currency among some of the members of the European Union has raised many concerns about the ability of EMU to deal with shocks that are specific to regions or countries. The assumption behind these concerns is that national business cycles in Europe are fairly pronounced and that exchange rates are good stabilizing tools. This paper characterizes regional and national fluctuations within the European Union and studies how the process of integration and the creation of the EMS has affected these patterns. Our results indicate that national borders have seen their economic significance reduced over time as the process of integration has increased cross-border correlations and reduced within-border comovements.

Feenstra, Robert C.

PD March 1996. **TI** U.S. Imports, 1972-1994: Data and Concordances. **AA** University of California, Davis and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5515; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** \$5.00. **JE** F10, F14. **KW** Import Data. Trade Flows. **AB** This paper describes data on U.S. imports from 1972-1994, classified according to the Tariff Schedule of the U.S. Annotated (TSUSA), Harmonized System (HS), Standard International Trade Classification (SITC, Revisions 2 and 3), and Standard Industrial Classification (SIC, 1972 basis), along with various concordances. All of these data sets are disaggregated by the source country for imports. These data are available on the CD-ROM: "NBER Trade Database, Disk 1: U.S. Imports, 1972-1994," which can be ordered for \$50 from the Publications Department, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138. The TSUSA and HS import data are at the most disaggregate level collected by the U.S. Census, and will be particularly useful for research on antidumping cases. The SITC import data will be valuable for those wanting to compare U.S. trade flows at a more aggregate level with comparable data for other countries. The SIC import data will be particularly useful for those wanting to study the effects of import competition on U.S. industries. A summary of the SIC data, which does not contain the source country detail and incorporates earlier years, is available via anonymous FTP from: nber.harvard.edu/pub/feenstra. A second CD-ROM, containing U.S. export data, will be released later in 1996.

TI Putting Things in Order: Patterns of Trade Dynamics and Macroeconomics. **AU** Rose, Andrew K.; Feenstra, Robert C.

Feldman, Ernesto

TI Exogenous Shocks, Deposit Runs and Bank Soundness: A Macroeconomic Framework. **AU** Blejer, Mario; Feldman, Ernesto; Feltenstein, Andrew.

Felli, Leonardo

TI Costly Coasian Contracts. **AU** Anderlini, Luca; Felli, Leonardo.

Feltenstein, Andrew

TI Exogenous Shocks, Deposit Runs and Bank Soundness: A Macroeconomic Framework. **AU** Blejer, Mario; Feldman, Ernesto; Feltenstein, Andrew.

Fennell, Susan

TI Adjusting to New Realities: MENA, The Uruguay Round, and the EU- Mediterranean Initiative. **AU** Alonso-Gamo, Patricia; Fennell, Susan; Sakr, Khaled.

Fernandez, Raquel

PD April 1997. **TI** Returns to Regionalism: An Evaluation of Non-Traditional Gains From RTAs. **AA** New York University. **SR** Centre for Economic Policy Research Discussion Paper: 1634; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 28. **PR** 4 pounds or \$8.00. **JE** F13, F15. **KW** Regional Trade Agreements. Credibility. Signaling. NAFTA. Europe Agreements.

AB The last decade has witnessed an explosion in the number of regional trade agreements (RTA's). There seems to be a general, if ill-defined, belief on the part of many policy-makers, and among some academics as well, that there is more to an RTA than the traditional gains from trade. This paper examines several possible benefits that RTA's may confer on their partners, including credibility, signaling, bargaining power, insurance, and coordination. It assesses the necessary conditions for each of these candidates to work; gives stylized examples of specific types of policy where it might be applicable; examines real cases where the explanation might be relevant; and discusses their overall plausibility. It concludes by examining NAFTA and the Europe Agreements viewed in this light.

PD May 1997. **TI** To Each According To...? Markets, Tournaments, and the Matching Problem with Borrowing Constraints. **AU** Fernandez, Raquel; Gali, Jordi **AA** New York University. **SR** Centre for Economic Policy Research Discussion Paper: 1627; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 30. **PR** 4 pounds or \$8.00. **JE** D52, E44, J41. **KW** Markets. Tournaments. Matching. Borrowing Constraints.

AB We compare the performance of markets and tournaments as allocative mechanisms in an economy with borrowing constraints. The model consists of a continuum of individuals who differ in their initial wealth and ability level (e.g. students) and that are to be assigned to a continuum of investment opportunities or inputs of different productivity (e.g. schools of different qualities). With perfect capital markets both mechanisms achieve the efficient allocation, though markets generate higher aggregate consumption because of the waste associated with the production of signals under tournaments. When borrowing constraints are present, however, tournaments dominate markets in terms of aggregate output and, for sufficiently powerful signaling technologies, also in terms of aggregate consumption.

Ferrall, Christopher

PD April 1995. **TI** Endogenous Work Hours and Practice Patterns of Canadian Physicians. **AU** Ferrall, Christopher; Gregory, Allan W.; Tholl, William G. **AA** Ferrall and Gregory: Queen's University. Tholl: Canadian Medical Association. **SR** Queen's Institute for Economic Research Discussion Paper: 924; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario K7L 3N6, Canada. **Website:** qed.econ.queensu.ca/pub/paper. **PG** 18. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** I11, J22, J23. **KW** Physician Behavior. Canada. Life-Cycle Model. Labor Allocation.

AB Using an extensive survey of Canadian physicians, this paper studies how physician practice patterns are shaped by demographic characteristics, physician specialty, and government policy. We model the simultaneous determination of group size, primary source of professional income (fee-for-service or salaried position), weekly hours of direct patient care, and total weekly hours of work. Coefficient estimates are precisely identified and are consistent with a lifecycle model of self-employed professionals. Hours of work peak after about twenty years of practice and the probability of having a solo practice rises steadily with experience. With all else constant in the model, physicians who work under fee-for-services see patients 11 more hours each week than physicians who are primarily salaried, and yet fee-for-service physicians work only one or two hours more per week in total.

PD March 1997. **TI** A Sequential Game Model of Sports Championship Series: Theory and Estimation. **AU** Ferrall, Christopher; Smith, Anthony A. Jr.. **AA** Ferrall: Queen's University. Smith: Carnegie Mellon University. **SR** Queen's Institute for Economic Research Discussion Paper: 945; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. **Website:** qed.econ.queensu.ca/pub/paper. **PG** 28. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** C15, C63, C70. **KW** Bootstrap. Strategic Incentives. World Series. NBA Championship. Stanley Cup.

AB Using data from the championship series in three professional sports (basketball, baseball, and hockey), the authors estimate the parameters of a sequential game model for the best-of-n-games championship series. The unique subgame perfect equilibrium determines performance levels based on exogenous home field advantage and abilities of the two players (teams). The model provides a robust computational framework for studying strategic incentives in any sports based on identical stages. The authors control for measured and unobserved difference in team strength, and they improve the small sample properties of their estimates using a bootstrap on the maximum likelihood estimates. They find negligible strategic effects in all three sports. The authors also estimate negligible unobserved heterogeneity: teams are estimated to be exactly as strong as they appear on paper.

Fingleton, John

PD April 1997. **TI** Optimal Determination of Bookmakers' Betting Odds: Theory and Tests. **AU** Fingleton, John; Waldron, Patrick. **AA** Trinity College. **SR** Centre for Economic Policy Research Discussion Paper: 1623; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 20. **PR** 4 pounds or \$8.00. **JE** D82, G13, L83. **KW** Inside Information. Betting Odds. Asset Pricing.

AB This paper develops a theoretical model of how bookmakers' odds are determined, given varying levels of inside information on the part of punters. Bookmakers' attitudes towards risk and the degree of competition between them will influence bookmaker behavior. Using a data set of 1696 races in Ireland in 1993, we find that bookmakers are extremely risk-averse, and estimate that operating costs and monopoly rents combined account for up to 4% of turnover and that between 3.1% and 3.7% of betting is by punters with inside information.

Fleming, Jeff

TI Implied Volatility Functions: Empirical Tests. **AU** Dumas, Bernard; Fleming, Jeff; Whaley, Robert E.

Flood, Robert P.

PD November 1996. **TI** Policy Implications of "Second-Generation" Crisis Models. **AU** Flood, Robert P.; Marion, Nancy P. **AA** Flood: International Monetary Fund, National Bureau of Economic Research and Dartmouth College. Marion: Dartmouth College. **SR** International Monetary Fund Working Paper: WP/97/16; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 9. **PR** not available. **JE** E31, E42, F31. **KW** Exchange Rates. Currency Crisis. Devaluation. Price Level. Monetary Union.

AB After the speculative attacks on government-controlled exchange rates in Europe and in Mexico, economists began to develop models of currency crises with multiple solutions. In these models, a currency crisis occurs when the economy suddenly jumps from one solution to another. This paper examines one of the new models, finding that raising the cost of devaluation may make a crisis more likely. Consequently, slow convergence to a monetary union, which increases the cost to the government of renegeing on an exchange rate peg, may be counterproductive. This conclusion is exactly the opposite of that obtained from earlier models.

Forni, Mario

PD April 1997. **TI** National Policies and Local Economies: Europe and the United States. **AU** Forni, Mario; Reichlin, Lucrezia. **AA** Forni: University of Modena. Reichlin: Universite Libres de Bruxelles. **SR** Centre for Economic Policy Research Discussion Paper: 1632; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 18. **PR** 4 pounds or \$8.00. **JE** C51, E32, O30. **KW** Factor Model. Business Cycle. European Integration. Output Fluctuations.

AB This paper studies the synchronization of output fluctuations in European regions and U.S. counties. We extend the two component dynamic factor model a la Sargent and Sims (1977) by introducing an intermediate-level shock, which is common to all regions (counties) in each country (state), but it is not common to Europe (United States) as a whole. We build on Forni and Reichlin (1995, 1996) to propose a simple method of estimation which is based on Law of Large Numbers results and exploits the large cross-sectional dimension of the data set. The empirical findings show that Europe has a level of integration similar to that of the United States. In general, we find that the national dimension in Europe is not very important: around 75% of output variance is explained by global and purely local dynamics. Similar numbers are found for U.S. counties and U.S. states. The study of the dynamic profile of the components, however, shows that Europe, unlike

the United States, has no traditional business cycle. Shocks are very persistent and the bulk of the variance is in the long run. We also find a European core of regions with a particularly high level of integration.

Forslid, Rikard

TI Trade Liberalization and Endogenous Growth: A q-Theory Approach. **AU** Baldwin, Richard E.; Forslid, Rikard.

PD March 1997. **TI** Agglomeration in a Core-Periphery Model with Vertically and Horizontally Integrated Firms. **AU** Forslid, Rikard; Ekholm, Karolina. **AA** Forslid: University of Lund, Ekholm: Industrial Institute for Economic and Social Research. **SR** Centre for Economic Policy Research Discussion Paper: 1607; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 17. **PR** 4 pounds or \$8.00. **JE** F12, F15, R12. **KW** Horizontally-Integrated Firms. Vertically-Integrated Firms. Economic Geography. Agglomeration.

AB This paper analyses the effect of allowing for a more general production structure in the core-periphery (CP) model. Two special cases of fully horizontally- and vertically-integrated firms are treated. The case of horizontally-integrated firms is a counter-example to the strong agglomeration effects found in the CP model. A symmetric equilibrium will always be stable and hence agglomeration is prevented. The introduction of vertically-integrated firms that can separate the location of headquarter activities from the location of production, has two effects. First, it tends to break the symmetry of the original CP model and thus lead to more agglomeration. Second, it also tends to decrease the parameter space in which full agglomeration occurs, and therefore leads to less agglomeration.

Fox, Douglas

TI Trade Sensitivity, Technology, and Labor Displacement. **AU** Addison, John; Fox, Douglas; Ruhm, Christopher J.

Francesconi, Marco

TI Family Matters. **AU** Ermisch, John F.; Francesconi, Marco.

Franciosi, Robert

TI Experiments with the Pivot Process for Providing Public Goods. **AU** Attiyeh, Greg; Franciosi, Robert; Isaac, Mark R.

Francois, Joseph F.

PD January 1997. **TI** Population Growth, Trade Policy, and Migration Incentives. **AU** Francois, Joseph F.; Nelson, Douglas. **AA** Francois: Erasmus University Rotterdam. Nelson: Tulane University. **SR** Centre for Economic Policy Research Discussion Paper: 1560; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 32. **PR** 4 pounds or \$8.00. **JE** F11, F12, J21. **KW** Trade. Wages. Employment.

AB Differences in the rate of population growth between developed and developing countries have potentially important implications for patterns of trade, migration, and the distribution of the gains from economic activity, both within and between nations. This paper focuses on migration-related effects. We offer a theoretical discussion of explicit theoretical linkages between population growth, trade policy and

migration. This is illustrated with numerical examples emphasizing linkages between changes in the terms of trade and migration patterns. The numerical analysis highlights issues not immediately evident from marginal analysis, including variations in the impact of policy over different time horizons.

TI Preferential Trade Liberalization in the North Atlantic. **AU** Baldwin, Richard E.; Francois, Joseph F.

Francois, Patrick

PD October 1995. **TI** A Theory of Gender Discrimination Based on the Household. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 929; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 32. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** E24, J16, J41, J71. **KW** Gender Discrimination. Efficiency Wages. Household Models. Nash Equilibrium.

AB This paper presents a new theory of gender discrimination in competitive labor markets which does not rely on gender asymmetries. Women and men are organized into households which have identical household specific human capital. When labor market characteristics differ, the possibility of mutually beneficial within household trades arises. Discrimination involves occupational segregation with men obtaining high paying efficiency wage jobs and women in piece rate work. It is shown that there always exists a Nash equilibrium in which firms benefit from discrimination by allocating high paying jobs exclusively to men as this ensures their employees (men) enjoy the benefits of within household trade and will satisfy incentive compatibility at a lower wage. The model thus provides an explanation for discrimination in competitive labor markets even when the sexes are completely identical.

TI Investment Coordination and Demand Complementarities. **AU** Baland, Jean-Marie; Francois, Patrick.

Frank, J.

TI Performance-Related Pay. **AU** Booth, Alison L.; Frank, J.

Fullerton, Don

PD March 1996. **TI** Second-Best Pollution Taxes. **AA** University of Texas at Austin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5511; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 9. **PR** \$5.00. **JE** H21, H23, Q28, Q38. **KW** Pollution Taxes. Pigouvian Rate.

AB When government needs more revenue than is available from a pollution tax rate equal to marginal environmental damage, our intuition tells us to raise the tax on the clean good above zero and to raise the tax on the dirty good above that first-best Pigouvian rate. Yet new results suggest that the second-best pollution tax is below the Pigouvian rate. This note reconciles these views by pointing out that these new results use a labor tax to acquire additional revenue, and that the labor tax is equivalent to a uniform tax on both clean and dirty goods. Thus, depending on the normalization, the total tax on the dirty good can be above the Pigouvian rate, these recent

results are meant to show that the difference between the tax on the dirty good and the tax on the clean good is less than the Pigouvian rate. Any one tax rate can be set to zero as a conceptual matter, but implementation of some taxes might be easier than others as a practical matter.

PD April 1996. **TI** Sulfur Dioxide Compliance of a Regulated Utility. **AU** Fullerton, Don; McDermott, Shaun P.; Caulkins, Jonathan P. **AA** Fullerton: University of Texas at Austin and National Bureau of Economic Research. McDermott and Caulkins: Carnegie Mellon University. **SR** National Bureau of Economic Research Working Paper: 5542; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** L94, Q25. **KW** Electric Utilities. Sulfur Dioxide. Emissions. Abatement. **AB** Electric utilities can reduce sulfur dioxide emissions through a variety of strategies such as adding scrubbers, switching to low-sulfur coal, or shifting output between generating plants with different emissions. The costs of achieving a given emission target can be minimized using a market for emission allowances, as under the Clean Air Act Amendments of 1990, if firms with high abatement costs buy allowances while those with low abatement costs reduce emissions and sell allowances. However, public utility commissions regulate which costs can be passed to customers. Previous theoretical work has analyzed effects of regulations on a utility's choice between permits and a single continuous "abatement technology." Here, we consider three abatement technologies and the discrete choices among them. Our numerical model uses market and engineering information on permit prices, scrubber cost and sulfur removal efficiency, alternative fuel costs and sulfur content, plus generating plant costs and efficiency. Using illustrative sets of parameters, we find that regulatory rules could more than double the cost of sulfur dioxide compliance.

PD May 1996. **TI** Policies for Green Design. **AU** Fullerton, Don; Wu, Wenbo. **AA** Fullerton: University of Texas and National Bureau of Economic Research. Wu: Carnegie Mellon University. **SR** National Bureau of Economic Research Working Paper: 5594; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** D51, D62, H23. **KW** Externalities. Social Cost. Fiscal Policy. Recycling.

AB The authors analyze alternative policies such as a disposal content fee, a subsidy for recyclable designs, unit pricing of household disposal, a deposit-refund system, and a manufacturer "take-back" requirement. They build a simple general equilibrium model in which household utility depends on a negative externality from total waste generation, and in which firms use primary and recycled inputs to produce output that has two "attributes": packaging per unit output and recyclability. If households pay the social cost of disposal, then they send the right signals to producers to reduce packaging and to design products that can more easily be recycled. But if local governments are constrained to collect household garbage for free, then households do not send the right signals. The socially optimal attributes can still be achieved by a tax on producers' use of packaging and subsidy to producers' use of recyclable designs.

Fung, K. C.

PD May 1996. **TI** Accounting for Chinese Trade: Some National and Regional Considerations. **AA** University of California, Santa Cruz. **SR** National Bureau of Economic Research Working Paper: 5595; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** F13, F14. **KW** China. Trade. Exports. Foreign Investment. Illegal Trade.

AB China's trade has three features: high incidence of re-exports through Hong Kong, high degree of trade related to foreign investment, and large amount of "illegal" trade. Re-exports occur when imports to Hong Kong are consigned to a buyer in Hong Kong, who adds a markup, and exports the goods elsewhere without fundamentally changing the goods. Using U.S. data and accounting for re-exports, the U.S.-China trade balance has to be lowered by 35 percent. Foreign investments in China accounted for 45 percent of China's exports. Foreign investments include foreign direct investment (FDI) and foreign subcontracting. "Illegal" trade between China and Taiwan has been induced by Taiwan's "no direct trade" policy. Illegal trade such as smuggling and tariff evasion also affect China's trade with her other trading partners.

Gali, Jordi

TI To Each According To...? Markets, Tournaments, and the Matching Problem with Borrowing Constraints. **AU** Fernandez, Raquel; Gali, Jordi

Garcia, Alicia

PD June 1997. **TI** World Commodity Prices as a Forecasting Tool for Retail Prices: Evidence From the United Kingdom. **AU** Garcia, Alicia; Thornton, John. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/70; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 13. **PR** not available. **JE** E31, E32, E37, E52. **KW** Commodity Prices. Monetary Policy. United Kingdom. Cointegration. Inflation Targeting.

AB This paper investigates, using cointegration and Granger-causality techniques, whether a stable long-run comovement exists between world commodity prices and U.K. retail prices, and whether short-run changes in commodity prices convey information about future movements in U.K. retail prices. The results show noncointegration and no unidirectional Granger causality from commodity to retail prices. These findings suggest that little may be gained from using developments in commodity prices to forecast movements in retail prices in the inflation-targeting framework followed by the U.K. monetary authorities.

Garella, Paolo G.

TI Multiple Versus Single Banking Relationships. **AU** Guiso, Luigi; Detragiache, Enrica; Garella, Paolo G.

Garibaldi, Pietro

PD April 1997. **TI** The Asymmetric Effects of Monetary Policy on Job Creation and Destruction. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/57; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 17. **PR** not available. **JE** E24, E52, F31, F41, J41. **KW** Monetary Policy. Job Creation. Job Destruction. Search Models. Interest Rates.

AB This paper presents theory and evidence on the asymmetric effects of monetary policy on job creation and job destruction. First, it solves a dynamic matching model and it shows how interest rate changes result in an asymmetric response of job creation and destruction. Second, it looks at how changes in the federal fund rate affect gross job flows in the U.S. manufacturing industry, and it finds evidence of asymmetry. Tight policy increases job destruction and reduces net employment changes. Conversely, easy policy appears ineffective in stimulating job creation.

Gaspar, Jess

PD May 1996. **TI** Information Technology and the Future of Cities. **AU** Gaspar, Jess; Glaeser, Edward L. **AA** Gaspar: Stanford University. Glaeser: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5562; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 43. **PR** \$5.00. **JE** L96, R11, R15. **KW** Cities. Travel Costs. Interactive Communication.

AB Will improvements in information technology eliminate face-to-face interactions and make cities obsolete? In this paper, we present a model where individuals make contacts and choose whether to use electronic or face-to-face meetings in their transactions. Cities are modeled as a means of reducing the fixed travel costs involved in face-to-face interactions. When telecommunications technology improves, there are two opposing effects on cities and face-to-face interactions: some relationships that used to be face-to-face will be done electronically (an intuitive substitution effect), and some individuals will choose to make more contacts, many of which result in face-to-face interactions. Our empirical work suggests that telecommunications may be a complement, or at least not a strong substitute for cities and face-to-face interactions. We also present simple models of learning in person, from a written source, or over the phone, and find that interactive communication dominates other forms of learning when ideas are complicated.

Gatzonas, E. K.

TI Financial Innovations Involving the Greek Drachma. **AU** Papaioannou, Michael; Gatzonas, E. K.

Gavin, Michael

TI Optimal Tax and Debt Policy with Endogenously Imperfect Creditworthiness. **AU** Aizenman, Joshua; Gavin, Michael; Hausmann, Ricardo.

Gehrig, Thomas

PD May 1997. **TI** Bid-Ask Spreads with Indirect Competition Among Specialists. **AU** Gehrig, Thomas; Jackson, Matthew. **AA** Gehrig: Universitat Basel. Jackson: Northwestern University. **SR** Centre for Economic Policy Research Discussion Paper: 1648; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 22. **PR** 4 pounds or \$8.00. **JE** D43, G12. **KW** Bid-Ask Spreads. Market Structure. Indirect Competition.

AB We examine the bid-ask quotes offered by specialists (or dealers) who face indirect competition from other specialists who trade in related assets. In the context of a simple model where investors have mean variance preferences, we

characterize the equilibrium bids and asks quoted by K specialists in N assets, where some specialists may control more than one asset. We compare the equilibrium spreads as the number (and factor structure) of the assets each specialist controls is varied. It is shown that for some constellations of initial portfolio holdings and asset covariance it is socially preferable to have competing specialists, while for others it is socially preferable to have their actions coordinated (or to have one specialist control several assets). In a simple factor model, we show how the optimal specialist control structure depends on whether the assets trade as substitutes or complements. In some situations it is beneficial to have specialist power concentrated within industries, in other situations, across industries, and in yet other situations, not to be concentrated at all.

Gertler, Mark

TI How the Bundesbank Conducts Monetary Policy. **AU** Clarida, Richard; Gertler, Mark.

Ghironi, Fabio

TI How Will Transatlantic Policy Interactions Change with the Advent of EMU? **AU** Eichengreen, Barry; Ghironi, Fabio.

Ghosh, Atish

PD July 1997. **TI** Inflation in Transition Economies: How Much? And Why? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/80; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 26. **PR** not available. **JE** E10, E31, E41, E51, O11. **KW** Transition Economies. Inflation. Growth.

AB Following very high inflation rates at the beginning of the reform process, most transition countries have succeeded in lowering their inflation to more moderate rates. Inflation rates in the Baltics, Russia, and other countries of the former Soviet Union are now typically in the range of 10-60 percent. This essay examines whether a further reduction in inflation may be necessary. It concludes that low inflation may be important for achieving remonetization of the economy and sustained output growth.

Giorgianni, Lorenzo

TI Long-Horizon Exchange Rate Predictability? **AU** Berkowitz, Jeremy; Giorgianni, Lorenzo.

PD March 1997. **TI** Foreign Exchange Risk Premium: Does Fiscal Policy Matter? Evidence from Italian Data. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/39; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 28. **PR** not available. **JE** C42, F31, G12, H50, H60. **KW** Risk Premium. Fiscal Policy. Italy. Foreign Exchange.

AB This paper challenges the conventional view that foreign exchange risk premiums are small, not volatile, and unrelated to macroeconomic variables. For the Italian lira (1987-94), unconditional risk premiums, constructed using survey data to measure exchange rate expectations, are found to be sizable (relative to the dimension of the forward premium), highly volatile (relative to the variability of the forward bias), and predictable. Estimation of structural models of the risk premium suggests that anticipated fiscal contractions in Italy and lower uncertainty about the future path of fiscal policy are

associated with a lower risk premium on lira-denominated assets.

PD April 1997. **TI** Determinants of Korean Trade Flows and Their Geographical Destination. **AU** Giorgianni, Lorenzo; Milesi-Ferretti, Gian Maria. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/54; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 38. **PR** not available. **JE** F11, F14, F31, F32, F41. **KW** Korea. International Trade. Trade Elasticities. Export Direction. Trade Flows.

AB This paper investigates the behavior of Korean trade flows during the last three decades and presents estimates of aggregate export and import equations. In particular, it considers different choices for scale and price variables and assesses the relative merits of these alternative specifications in terms of stability and forecasting performance. It also provides an assessment of the drastic change in the geographical destination of Korean exports during the 1990's.

Gjerstad, Steven

PD March 1996. **TI** Multiple Equilibria in Exchange Economies With Homothetic, Nearly Identical Preferences. **AA** Hewlett Packard Laboratories and University of Arizona. **SR** University of Minnesota Center for Economic Research Discussion Paper: 288; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 26. **PR** no charge. **JE** D11, D51. **KW** Exchange Economy. Multiple Equilibria. Preference Aggregation. Representative Agent.

AB For agents with identical homothetic preferences (but possibly different endowments), aggregate excess demand can be derived from maximization of a utility function of a representative agent whose endowment is the sum of the individuals' endowments. Such an economy has a unique equilibrium. In this paper, a metric is defined on the set of preference relations representable by CES utility functions. It is then shown that there are agents whose preference relations are arbitrarily close to one another in the metric, and there are endowments for these agents, such that the resulting exchange economy has multiple Walrasian equilibria.

Glaeser, Edward L.

TI Information Technology and the Future of Cities. **AU** Gaspar, Jess; Glaeser, Edward L.

PD May 1996. **TI** Should Transfer Payments Be Indexed to Local Price Levels? **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5598; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** H53, H71, I38. **KW** Welfare. Redistribution Policy. Price Levels. Spatial Equilibrium. Marginal Utility.

AB This paper examines the optimal location-based redistribution policy and shows that adjustment for local price levels is occasionally optimal, but never for the reasons suggested by the popular press. First, the existence of a spatial equilibrium suggests that utility levels will be equalized across space. Second, due to relative prices, it is in fact less efficient to transfer to high cost areas. However, marginal utilities of income will not necessarily be equalized across space, and since optimal transfer policy equalizes marginal utilities, there

is possibly a rationale for indexing to local price levels. Given the author's best parameter estimates, a one percent increase in local prices should lead to a .5 percent increase in transfers, when transfers are 2/3 of total income. Also, estimates from current AFDC payments suggest that the current level of implicit indexing is too high to possibly be optimal.

Glyn, Andrew

TI Quantifying a Dangerous Obsession? Competitiveness and Export Performance in an OECD Panel of Industries. **AU** Carlin, Wendy; Van Reenen, John; Glyn, Andrew.

Gokhale, Jagadeesh

PD May 1996. **TI** Understanding the Postwar Decline in U.S. Saving: A Cohort Analysis. **AU** Gokhale, Jagadeesh; Kotlikoff, Laurence J.; Sabelhaus, John. **AA** Gokhale: Federal Reserve Bank of Cleveland. Kotlikoff: Boston University and National Bureau of Economic Research. Sabelhaus: Congressional Budget Office. **SR** National Bureau of Economic Research Working Paper: 5571; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 46. **PR** \$5.00. **JE** D12, E21. **KW** Savings Rate. Cohort Data. Consumption. Propensities.

AB Since 1980, the U.S. net national saving rate has averaged less than half the rate observed in the 1950's and 60's. This paper develops a unique cohort data set to study the decline in U.S. national saving. It decomposes postwar changes in U.S. saving into those due to changes in cohort-specific consumption propensities, those due to changes in the intergenerational distribution of resources, those due to the changes in government spending on goods and services, and those due to changes in demographics. Our findings are striking. The decline in U.S. saving can be traced to two factors: The redistribution of resources from young and unborn generations with low or zero propensities to consume toward older generations with high consumption propensities, and a significant increase in the consumption propensities of older Americans. Most of the redistribution of the elderly reflects the growth in Social Security, Medicare, and Medicaid benefits. The increase in the elderly's consumption propensities may also reflect government policy, namely the fact that Social Security, Medicare, and Medicaid benefits are paid in the form of annuities and that, in the case of Medicare and Medicaid, the annuities are in-kind and must, therefore, be consumed.

Goldfajn, Ilan

PD July 1997. **TI** Capital Flows and the Twin Crises: The Role of Liquidity. **AU** Goldfajn, Ilan; Valdes, Rodrigo. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/87; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 30. **PR** not available. **JE** F02, F31, F32, F34, F41. **KW** Capital Flows. Liquidity. Exchange Rates. Financial Intermediaries.

AB This paper develops a model that focuses on the interaction of liquidity creation by financial intermediaries with capital flows and exchange rate collapses. The intermediaries' role of transforming maturities is shown to result in larger movements of capital and a higher probability of crisis. These movements resemble the observed cycle in capital flows: large inflows, crisis and abrupt outflows. The model highlights how adverse productivity and international interest rate shocks may

trigger a sudden outflow of capital and an exchange collapse. The initial shock is magnified by the behavior of individual foreign investors linked through their deposits in the intermediaries. The expectation of an eventual exchange rate crisis links investors' behavior even further.

Golub, Stephen

PD April 1997. **TI** International Labor Standards and International Trade. **AA** Swarthmore College and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/37; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 32. **PR** not available. **JE** F13, F42, J31, J38. **KW** Labor Standards. Social Clause. World Trade Organization. International Trade. **AB** This paper reviews controversies regarding linkage of international trade and labor standards. Pressures for international harmonization of labor standards arise in the contest of increased trade between countries with large disparities in wages, and also reflect the history of labor standards. A critical distinction is made between standards related to fundamental human rights and those related to employment conditions. The main conclusion is that trade sanctions to enforce labor standards should not be an option, but that international agreements on core labor standards, with voluntary compliance, may, apart from being worthwhile on ethical grounds, defuse calls for protection.

Gomes, Joao

TI Equilibrium Unemployment. **AU** Rebelo, Sergio; Gomes, Joao; Greenwood, Jeremy.

Gordon, James

PD March 1997. **TI** The Effect of Increasing Government Employment on Growth: Some Evidence from Africa. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/33; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 14. **PR** not available. **JE** H50, J23, O10, O40. **KW** Growth. Government Employment. Africa. Wagner's Law.

AB In contrast to the experience in industrial countries, government sectors in a number of African countries grew rapidly in relative size through the 1980's and early 1990's, implying a differential between measured GDP growth and growth of private sector activity. In these countries, the government sector was also an important source of employment growth. Leaving aside issues of crowding out, boosting growth in this way raises questions of fiscal sustainability. It also argues caution in interpreting growth performance.

Gordon, Robert J.

PD March 1996. **TI** Problems in the Measurement and Performance of Service-Sector Productivity in the United States. **AA** Northwestern University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5519; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 46. **PR** \$5.00. **JE** D24, L80, O47. **KW** Service-Sector Productivity. Productivity Slowdown. Productivity Growth.

AB Not only has U.S. productivity been poor by international standards, but it is highly heterogeneous at the disaggregated industry level. This dispersion of performance argues against a

single over-arching explanation of the slowdown. The recent shift to chain-weighted productivity measures substantially increases the magnitude of the U.S. productivity slowdown and shifts it later in time. Performance in the 1970's is better than previously thought, while performance in the 1990's has been substantially worse. In addition, productivity performance in each decade has been understated due to an upward bias in the Consumer Price Index. This "CPI bias" has led to an uneven understatement of productivity change. The paper emphasizes two substantive causes of the productivity slowdown that go beyond measurement errors. First, some industries (e.g., electric utilities and airlines) reached a technological frontier in which the sources of earlier rapid productivity growth were exhausted. Second, slow productivity growth in food retailing and some service industries reflects a feedback from the weak bargaining position of U.S. labor. Weak unions, a falling real minimum wage, and immigration have combined to keep real wages in U.S. service industries relatively low, and this encourages overhiring by the standards of some other industrial nations.

Gordon, Roger H.

PD April 1996. **TI** Tax Avoidance and Value-Added vs. Income Taxation in an Open Economy. **AU** Gordon, Roger H.; Nielsen, Soren Bo. **AA** Gordon: University of Michigan and National Bureau of Economic Research. Nielsen: Copenhagen Business School. **SR** National Bureau of Economic Research Working Paper: 5527; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** E62, H21, H25, H26. **KW** Tax Avoidance. Income Tax. Value-Added Taxation.

AB Ignoring tax avoidance possibilities, a value-added tax and a cash-flow income tax have identical behavioral and distributional consequences. Yet the available means of tax avoidance under each are very different. Under a VAT, avoidance occurs through cross-border shopping, whereas under an income tax it occurs through shifting taxable income abroad. Given avoidance, we show that a country would make use of both taxes in order to minimize the efficiency costs of avoidance activity, relying relatively more on that tax that is harder to avoid. We then make use of aggregate Danish tax and accounting data from 1992 to measure the amount of avoidance that occurred under the two taxes. While the estimates of avoidance activity are small, the figures imply that Denmark could reduce the real costs of avoidance activity by putting more weight on income rather than value-added taxes.

PD July 1997. **TI** Do Tax Rates Encourage Entrepreneurial Activity? **AA** University of Michigan and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/88; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 31. **PR** not available. **JE** H24, H25, K34, L11, O31. **KW** Entrepreneurs. Income Shifting. Tax Rates. Income Tax.

AB When the top personal tax rates are above the corporate rate, high-income individuals have an incentive to reclassify their earnings as corporate rather than personal income for tax purposes. U.S. tax law at least imposes strict limits on the extent to which employees in publicly traded corporations can engage in such income shifting. However, entrepreneurs starting new firms can easily reclassify their income for tax purposes. This tax incentive therefore favors entrepreneurial activity. The paper discusses how best to subsidize entrepreneurial activity while avoiding other economic

distortions.

Gourinchas, Pierre-Olivier

PD April 1996. **TI** Exchange Rate Dynamics and Learning. **AU** Gourinchas, Pierre-Olivier; Tornell, Aaron. **AA** Gourinchas: Massachusetts Institute of Technology. Tornell: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5530; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. **Website:** www.nber.org. **PG** 38. **PR** \$5.00. **JE** F31. **KW** Interest Rates. Exchange Rates.

AB Interest rate expectations are essential for exchange rate determination. Using a unique Survey data set on interest rate forecasts from 1986 to 1995 for G7 countries, we find that interest rate shocks were significantly more persistent in sample than expected by the market. This is consistent with $f\beta$'s finding that changes in the forward rate reflect changes in exchange rate expectations. We then present a model of nominal exchange rate determination that rationalizes the forward discount puzzle and exhibits the delayed overshooting pattern found by ee: following a monetary expansion that reduces the domestic interest rate, there is gradual depreciation of the exchange rate followed by a gradual appreciation several months later. Delayed overshooting results from (a) the interaction of learning about the current state of affairs, and the intrinsic dynamic response of interest rates to monetary shocks and (b) the discrepancy between the actual distribution of shocks and its expectation by market participants. This discrepancy is consistent with rational expectations if either (a) there is a small sample or Peso problem or (b) the true structure of the economy evolves over time and agents are learning with some delay.

Govindan, Srihari

PD April 1997. **TI** On the Generic Finiteness of Equilibrium Outcome Distributions in Game Forms. **AU** Govindan, Srihari; McLennan, Andrew. **AA** Govindan: University of Western Ontario. McLennan: University of Minnesota. **SR** University of Minnesota Center for Economic Research Discussion Paper: 299; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 20. **PR** no charge. **JE** C72. **KW** Generic Finiteness. Normal Form. Nash Equilibrium. Game Theory.

AB Consider nonempty finite pure strategy sets S_1, S_2, \dots, S_n , let $S = S_1 \times S_2 \times \dots \times S_n$, let "B" be a finite space of "outcomes," let "C" be the set of probability distributions on "B", and let "D" be a function from S to "C". We study the conjecture that for any utility in a generic set of n-tuples of utilities on "B" there are finitely many distributions on "B" induced by the Nash equilibria of the game given by the induced utilities on S. We give a counterexample refuting the conjecture for n greater than or equal to 3. Several special cases of the conjecture follow from well-known theorems, and we provide some generalizations of these results.

Grasshoff, Ulrike

PD March 1997. **TI** Corporate Restructuring, Downsizing and Managerial Compensation. **AU** Grasshoff, Ulrike; Schwabach, Joachim. **AA** Humboldt University. **SR** University of Cambridge, ESRC Centre for Business

Research Working Papers: WP50; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. **Website:** www.econ.cam.ac.uk/dae. **PG** 11. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** D82, J31, L20, M14. **KW** Management Compensation. Corporate Downsizing. Agency Theory. Incentive Compatibility. Germany.

AB There is a common consensus that managerial compensation is strongly tied to firm size and much less so to financial performance. One suspects that observed restructuring and downsizing in corporations in recent years may have an effect on these results. Based on multi-task theoretical considerations, the evidence for German industrial firms shows that pay-for-firm-size elasticities decrease only for large firms as they change their strategy from growth to downsizing. Furthermore, pay-for-performance elasticities are contrary to the predictions of agency theory. Both results provide further support for the common belief that compensation contracts in public corporations seem not to be incentive-compatible.

Grawe, Oliver R.

TI Entry Policy and Entry Subsidies. **AU** Reitzes, James D.; Grawe, Oliver R.

Greenslade, J.

PD April 1997. **TI** Employment Determination in the UK Manufacturing Sector in the Presence of Variable Adjustment Costs: A Disaggregated Analysis. **AU** Greenslade, J.; Henry, B.; Lee, K. **AA** Greenslade and Henry: London Business School. Lee: University of Leicester. **SR** Centre for Economic Policy Research Discussion Paper: 1618; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** not available. **PR** 4 pounds or \$8.00. **JE** C22, J23. **KW** Employment Determination. Structural Change. Manufacturing.

AB Employment determination is investigated in nine industries which comprise the UK manufacturing sector over the period 1972-93. Two alternative models of employment determination are estimated for each industry, one allowing non-linearities in their dynamic specification to accommodate adjustment costs. We review evidence for possible structural breaks in the models. Some evidence is discovered of a change having occurred in some of the sectors. The two (disaggregated) industrial models informs the choice of an appropriate model for employment determination in the (aggregate) manufacturing sector taken as a whole. In the aggregate model, we find little evidence of structural change.

Greenwood, Jeremy

TI Equilibrium Unemployment. **AU** Rebelo, Sergio; Gomes, Joao; Greenwood, Jeremy.

Gregory, Allan W.

TI Endogenous Work Hours and Practice Patterns of Canadian Physicians. **AU** Ferrall, Christopher; Gregory, Allan W.; Tholl, William G.

PD November 1995. **TI** Common and Country-Specific Fluctuations in Productivity, Investment, and the Current Account. **AU** Gregory, Allan W.; Head, Allen C. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 931; Department of

Economics, Institute for Economic Research, Queen's University, Kingston, Ontario K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. PG 24. PR \$3.21 Canada; \$3.50 U.S. and Foreign. JE C32, F41. KW Kalman Filter. Current Account. Solow Residual. Investment.

AB Dynamic factor analysis and Kalman filtering are used to construct a measure of common economic activity for the G7 countries. Common movements are important in productivity, but account for a substantially smaller share of movements in investment, and virtually none of the variation in the current accounts. For all seven countries, country-specific investment fluctuations have a significant negative impact on the current account while country-specific productivity movements have little effect. A multi-country dynamic general equilibrium model is analyzed which is consistent with the authors' qualitative findings. The model overstates, however, the quantitative importance of investment fluctuations for movements in the current account.

TI Standard Mortality Ratios in Capitation Funding Models: Empirical Issues From Canadian Data. AU Bedard, Kelly; Dorland, John; Gregory, Allan W.; Rosenberg, Mark.

Gregson, Mary Eschelbach

PD November 1996. **TI** Anthropometric Versus Conventional Economic Measures of the Standard Living: A Search for Theoretical Consistency. AU Gregson, Mary Eschelbach; Grubb, Farley. AA Gregson: Knox College. Grubb: University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 96/12; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. PG 39. PR not available. JE D63, I31. KW Anthropometric Measures. Height. Real Income. Standard of Living.

AB Anthropometric measures, principally heights, have been proposed as a substitute for conventional economic measures, such as real income per capita, of the standard of living. The theoretical connection between height and real income, however, has not been well articulated in the literature. This paper explores this connection. If heights are driven by nutrition, as is commonly assumed, then the scope for relative price induced endogenous trade-offs between nutrition and other goods makes heights a poor proxy for real income measures of the standard of living. If, on the other hand, heights are driven by exogenous disease and climatic shocks, then heights may be a consistent proxy for real income measures of the standard of living when other exogenous shocks are absent.

Gropp, Reint

PD April 1997. **TI** The Effect of Expected Effective Corporate Tax Rates on Incremental Financing Decisions. AA International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/46; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE G32, H25, H32. KW Corporate Finance. Tax Rates. Debt Financing. Business Taxes.

AB This paper uses U.S. panel data to estimate the effect of expected effective corporate tax rates on firm's leverage. The paper directly estimates expected corporate tax rates using rational expectations. The estimated measures of the expected effective tax rates of firms are related to a continuous measure

of incremental debt financing. The paper finds that expected effective tax rates are significantly and positively related to a higher level of debt financing. Simulations suggest that debt issues would double if firms were unable to shield profits and actually faced the statutory tax rate.

Grossman, Michael

TI Public Policy and Youth Smokeless Tobacco Use. AU Chaloupka, Frank J.; Grossman, Michael; Tauras, John A.

Grubb, Farley

TI Anthropometric Versus Conventional Economic Measures of the Standard Living: A Search for Theoretical Consistency. AU Gregson, Mary Eschelbach; Grubb, Farley.

PD March 1997. **TI** Social Science Versus Social Rhetoric: Methodology and the Pacific Labor Trade to Queensland, Australia. AA University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 97/04; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. PG 47. PR not available. JE F22, J61, N30, N50, O15. KW Melanesia. Australia. Contracts. Labor Trade.

AB Between 1863 and 1904, 60,000 Melanesian Islanders were transported to Queensland, Australia under contracts of indenture to work in the sugar industry. The applicability of economic and Marxian theories to the study of this trade is explored. The source of methodological conflicts over the definition of coercion, the malleability and sovereignty of desires, and the nature of exchange are explained. How these theories assume away important questions to historians is also explained. Finally, the scientific application of economic theory to this trade is illustrated with regard to recruitment and repatriation, treatment and mortality, the reorganization of the sugar industry, and the abolition of the trade.

Gruber, Jonathan

PD June 1996. **TI** Spousal Labor Supply As Insurance: Does Unemployment Insurance Crowd Out the Added Worker Effect? AU Gruber, Jonathan; Cullen, Julie. AA Gruber: Massachusetts Institute of Technology and National Bureau of Economic Research. Cullen: Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 5608; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 32. PR \$5.00. JE D91, E24, H53, I38, J65. KW Unemployment Insurance. Crowding Out. Added-Worker Effect. Labor Supply.

AB This paper considers the role of spousal labor supply as insurance against spells of unemployment. Standard theory suggests that women should work more when their husbands are out of work, but there has been little empirical support for this contention. The paper suggests that one reason for the absence of the Added Worker Effect (AWE) may be that unemployment insurance (UI) is providing a state-contingent income stream that counteracts the negative income shock from the husband's unemployment. The paper in fact suggests that increases in the generosity of UI lower labor supply among wives of unemployed husbands. The results suggest that UI is crowding out a sizable fraction of offsetting spousal earnings. The paper also provides evidence that families are making labor supply decisions in a life cycle context, since there are effects of UI on the labor supply of wives of employed

husbands who face high unemployment risk.

Grubert, Harry

TI The Significance of International Tax Rules for Sourcing Income: The Relationship Between Income Taxes and Trade Taxes. AU Mutti, John; Grubert, Harry.

Guiso, Luigi

PD May 1997. TI Multiple Versus Single Banking Relationships. AU Guiso, Luigi; Detragiache, Enrica; Garella, Paolo G. AA Guiso: Banca d'Italia. Detragiache: International Monetary Fund. Garella: University of Bologna. SR Centre for Economic Policy Research Discussion Paper: 1649; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 36. PR 4 pounds or \$8.00. JE G21, G33. KW Multiple Banking. Relationship Banking. Corporate Finance.

AB This paper develops a theoretical model in which firms may choose multiple banking relationships to reduce the risk that financing will be denied by "relationship banks" should the latter experience liquidity problems and refuse to roll over lines of credit. The inability to refinance from relationship banks signals unfavorable information about the quality of the firm's project, which may also prevent the firm from obtaining credit from other banks. We show that if this "lemons" problem is severe, it is optimal to establish a relationship with more than one bank in spite of higher transaction costs; if it is mild, a single banking relationship is optimal. We find that the severity of the lemons problem depends directly on the inefficiency of bankruptcy procedures and inversely on the "fragility" of the banking system. The paper concludes with a comparison of bank-firm relationships in Italy and the United States, characterized respectively by multiple and single banking. We present evidence that bankruptcy costs are significantly higher and banks less fragile in Italy than in the United States, suggesting that the factors identified by the theoretical model are relevant in practice.

Halikias, Ioannis

TI Aspects of the Monetary Transmission Mechanism under Exchange Rate Targeting: The Case of France. AU Levy, Joaquin; Halikias, Ioannis.

Hall, Bronwyn H.

TI Estimating the Productivity of Research and Development: An Exploration of GMM Methods Using Data on French and United States Manufacturing Firms. AU Mairesse, Jacques; Hall, Bronwyn H.

Hallerberg, Mark

TI Electoral Institutions, Cabinet Negotiations, and Budget Deficits within the European Union. AU von Hagen, Jurgen; Hallerberg, Mark.

TI Sequencing and the Size of the Budget: A Reconsideration. AU von Hagen, Jurgen; Hallerberg, Mark.

Haltiwanger, John

TI Labor Productivity: Structural Change and Cyclical Dynamics. AU Baily, Martin Neil; Bartelsman, Eric J.; Haltiwanger, John.

Hamann, Alfonso J.

TI Exchange Rate-Based Stabilization in Western Europe: Greece, Ireland, Italy and Portugal. AU Detragiache, Enrica; Hamann, Alfonso J.

Hamann, Javier

PD February 1997. TI The Reform of the Pension System in Italy. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/18; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE G23, H55. KW Italy. Public Pensions. Pension Plans. Social Insurance. AB Italy's pension system was reformed in August 1995. The new system has various desirable long-run properties and, overall, it represents an improvement over earlier systems. However, it fails to address two longstanding problems: extremely high contribution rates and a lack of provisions for dealing with the substantial deterioration in demographic ratios expected over the next 30-40 years.

Hamermesh, Daniel S.

PD May 1996. TI Multilevel "General Policy Equilibria": Evidence from the American Unemployment Insurance Tax Ceiling. AU Hamermesh, Daniel S.; Scoones, David. AA University of Texas and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5578; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 24. PR \$5.00. JE J50, J65. KW Unemployment Insurance. Unionism.

AB In a large variety of multilevel political systems changes imposed by a higher authority alter the equilibrium panoply of lower-level policies. The new equilibrium depends on the type of change imposed and on the relative strengths of and differences among interested parties at the lower level. As an example we describe how the equilibrium parameters of American states' unemployment insurance (UI) systems are changed when the federal government raises the minimum annual earnings on which employers are taxed to finance UI benefits. Even though benefits determine total taxes at a point in time within state systems, bargaining among the interested parties alters the equilibrium level of benefits and taxes. We estimate a "difference-in-differences" model describing total system costs in those states where federal increases in 1972, 1978 and 1983 forced increases in the tax ceiling. Holding constant changes in interstate differences in unemployment, where the federal constraint was binding costs rose roughly 20 percent above where they would have been. The increase was larger in those states where unionism was greater. The theoretical model and the implied empirical analysis suggest themselves as examples for future research on a variety of topics in labor economics, public finance and international trade.

Hansen, Claus Thustrup

TI Industrial Structure, Menu Costs and the Non-Neutrality of Money. AU Dixon, Huw David; Hansen, Claus Thustrup.

Hanson, Gordon

PD May 1996. TI Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border. AU Hanson, Gordon; Spilimbergo, Antonio. AA Hanson: University of

Texas and National Bureau of Economic Research. Spillimbergo: Inter-American Development Bank. SR National Bureau of Economic Research Working Paper: 5592; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG not available. PR \$5.00. JE E24, F22, J61, O15. KW Illegal Immigration. Mexico. Real Wage. Border Enforcement.

AB The authors examine illegal immigration to the United States from Mexico over the period 1976-1995. Based on a simple migration model, they postulate the existence of an apprehensions function, which expresses apprehensions at the border as a function of illegal attempts to cross the border and U.S. border-enforcement effort. The authors find that a 10 percent decrease in the Mexican real wage leads to a 7.5 percent to 8.8 percent increase in apprehensions at the border. Under plausible conditions this is a lower bound for the effect of the Mexican wage on attempted illegal immigration. It is the purchasing power of U.S. wages in Mexico, not the purchasing power of U.S. wages in the United States, that matters for border apprehensions, suggesting that migrants expect to maintain ties with Mexico. Border apprehensions are higher in the month following a large devaluation of the peso.

Hanushek, Eric A.

PD April 1996. TI Understanding the 20th Century Growth in U.S. School Spending. AU Hanushek, Eric A.; Rivkin, Steven G. AA Hanushek: University of Rochester and National Bureau of Economic Research. Rivkin: Amherst College. SR National Bureau of Economic Research Working Paper: 5547; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 36. PR \$5.00. JE I21, I22. KW School Spending. Teachers Salaries. Teacher Quality. Teacher Ratios.

AB The persistent increase in spending on elementary and secondary schools has gone virtually undocumented and has received insufficient attention. Real expenditure per student increased at 3 1/2 percent per year over the entire period of 1890-1990. A decomposition of the spending growth shows that it was propelled by a combination of falling pupil-teacher ratios, increasing real wages to teachers, and rising expenditures outside of the classroom. While the expansion of education for the handicapped has had a disproportionate effect on spending, most of the growth in expenditure during the 1980's came from other sources. Teacher salary increases, which reflect competitive pressures particularly for females, have nevertheless failed to keep up with wages in other occupations -- leading to likely declines in teacher quality over time. Moreover, the magnitude of the wage decline is larger than commonly thought because the relative aging of teachers has masked the sizable declines when teachers are compared to comparably aged people in other occupations.

PD April 1996. TI Aggregation and the Estimated Effects of School Resources. AU Hanushek, Eric A.; Rivkin, Steven G.; Taylor, Lori L. AA Hanushek: University of Rochester and National Bureau of Economic Research. Rivkin: Amherst College. Taylor: Federal Reserve Bank of Dallas. SR National Bureau of Economic Research Working Paper: 5548; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 40. PR \$5.00. JE I21. KW School Resources. Omitted Variable Bias. Aggregate

Data.

AB This paper attempts to reconcile the contradictory findings in the debate over school resources and school effectiveness by highlighting the role of aggregation in the presence of omitted variables bias. While data aggregation for well-specified linear models yields unbiased parameter estimates, aggregation alters the magnitude of any omitted variables bias. In general, the theoretical impact of aggregation is ambiguous. In a very relevant special case where omitted variables related to state differences in school policy, however, aggregation implies clear upward bias of estimated school resource effects. Analysis of High School and Beyond data provides strong evidence that aggregation inflates the coefficients on school explanation, the alternative explanation for the larger estimated impact with aggregate estimates. Since studies using aggregate data are much more likely to find positive school resource effects on achievement, these results provide further support to the view that additional expenditures alone are unlikely to improve student outcomes.

Haque, Nadeem

PD July 1997. TI Institutional Development: Skill Transference Through a Reversal of "Human Capital Flight" or Technical Assistance. AU Haque, Nadeem; Khan, M. Ali. AA Haque: International Monetary Fund. Khan: Johns Hopkins University and International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/89; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE F22, F35, O15, O19. KW Wages. International Migration. Brain Drain. Technology Transfer. Foreign Aid.

AB We examine the issue of technical assistance versus brain drain repatriation as alternative strategies for transferring scarce skills to a skill-poor economy. Technical assistance relies mainly on expatriate skills and labor from the host country, while brain drain repatriation seeks to effect a return of skills that might have been lost in migration. We show that, even in the simplest setting with imperfect information, a surprisingly rich menu of responses is obtained.

Hardy, Daniel

PD March 1997. TI Information Efficiency, Interest Rate Variability, and Central Bank Operations. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/26; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE D83, E31, E52, E58, G14. KW Central Banks. Monetary Policy. Open Market Operations. Informational Efficiency. Financial Markets.

AB It is shown how the frequency of central bank intervention in financial markets can affect the incentives for economic agents to acquire information, which will be reflected in market prices and thus become available to policy makers. The optimal frequency of intervention, and therefore the optimal interest rate variability, will balance the desirability of attaining given operational targets against the benefits of encouraging informational efficiency. The ability of the central bank to send clear signals of its own intentions will also depend on market informational efficiency.

PD March 1997. TI Market Information and Signaling in Central Bank Operations, or, How Often Should a Central Bank Intervene? AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/28;

International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 20. PR not available. JE D83, E52, E58, G14. KW Central Banks. Monetary Policy. Open Market Operations. Informational Efficiency.

AB A central bank must decide on the frequency with which it will conduct open market operations and the variability in the short-term money market that it will allow. It is shown how the optimal operating procedure balances the value of attaining an immediate target and broadcasting the central bank's intentions against the informational advantages to the central bank of allowing the free play of market forces to reveal more of the information available to market participants.

Hart, Robert A.

TI Multiple Job Holding as a 'Hedge' Against Unemployment. AU Wright, Robert E.; Bell, David N. F.; Hart, Robert A.

Hartwick, John M.

PD October 1996. **TI** The Financial Capital Constraint and the Valuation of Commercial Banking Activity. AA Queen's University. SR Queen's Institute for Economic Research Discussion Paper: 940; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. PG 34. PR \$3.21 Canada; \$3.50 U.S. and Foreign. JE G21, M41. KW Banking. Value-Added. Equity Capital.

AB Equity capital makes the value of liabilities equal the value of assets in a commercial bank's balance sheet. This fact makes valuation of banking activity straightforward. The cost of shareholder risk-bearing becomes a natural entry into the cost side of value-added. Expected losses from lending become an entry in value-added, and this leads to the concept of ex ante and ex post value-added. A model of a profit-maximizing bank is set out, and the role of homogeneity in the production functions turns out to be crucial in defining inputs and outputs. The implicit price of deposit capital is analyzed, including the question of whether deposits are a "cheap" source of funds to the bank.

PD March 1997. **TI** On Imputing for Financial Services in the National Accounts: Commercial Banking in General Equilibrium. AA Queen's University. SR Queen's Institute for Economic Research Discussion Paper: 946; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6 Canada. Website: qed.econ.queensu.ca/pub/paper. PG 23. PR \$3.21 Canada; \$3.50 U.S. and Foreign. JE D46, E44, G21, M41. KW National Accounting. Imputation. Commercial Banks. General Equilibrium.

AB We combine the income and capital accounts of financial intermediaries (commercial banks) and of non-financial firms and households to obtain a full accounting of the value of services provided by commercial banks to both depositors and borrowers. We track the payments for such services and find no missing items that need to be imputed for. So-called imputation turns out to be integration of the accounts of financial institutions with their borrowers and depositors. We also find that a large fraction of banking services are purely intermediate and thus that the net value-added, after integration, of the commercial banking sector in the total value-added of the economy is small. We also isolate terms that should be in the national accounts to represent the burden of risk-bearing by

equity holders (an entry for apparent profits of firms). Deposits as a stock of money in our economy is analyzed.

Hassler, John

PD March 1997. **TI** Employment Turnover and Unemployment Insurance. AU Hassler, John; Rodriguez, Mora Jose V. AA Hassler: Stockholm University. Rodriguez: Universitat Pompeu Fabra. SR Centre for Economic Policy Research Discussion Paper: 1609; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 25. PR 4 pounds or \$8.00. JE J65. KW Unemployment Insurance. Employment Turnover.

AB Two features distinguish European and U.S. labor markets. First, most European countries have a considerably more generous unemployment insurance system. Second, the duration of unemployment and employment spells are substantially higher in Europe -- employment turnover is lower. We show that self-insurance, i.e. saving and borrowing, is a good substitute for unemployment insurance when turnover is as high as in the United States. If the insurance system is less than perfectly actuarially fair, the employed median voter will prefer self-insurance to the unemployment insurance system if turnover is high. We also show that high unemployment insurance makes the unemployed more willing to wait for a job with low separation rates. This could make both high turnover/low insurance (U.S.) and low turnover/high insurance (Europe) stable equilibria. Low turnover also leads to a strong divergence between the long- and short-run interests of the employed. In the absence of devices that enable the median voter to bind future voters to some level of insurance, the voting cycle must be long to support a high level of insurance.

Hauber, A. Brett

PD October 1996. **TI** Nesting Structure Choice in a Random Utility Model of Recreation Demand. AU Hauber, A. Brett; Parsons, George R. AA University of Delaware. SR University of Delaware Department of Economics Working Paper: 96/10; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. PG 19. PR not available. JE C51, D12, D60, Q26. KW Random Utility. Recreation Demand. Logit Model. Nested Logit.

AB Random Utility Models (RUM) are widely applied to recreation demand studies, particularly in the estimation of the welfare impact of a change in environmental quality. The simple RUM takes the form of a conditional logit model. To overcome the restrictiveness of conditional logit, nested logit has become common in the literature. Because the exact nesting specification can vary, the question arises as to whether or not different specifications of the nesting structure yield different welfare results. We estimate a model using six different nesting structures and evaluate the results using three criteria. We find that when welfare estimation is the goal, the choice of nesting structure may be of only minor consequence.

Haufler, Andreas

TI Tax Competition for Foreign Direct Investment. AU Wooton, Ian; Haufler, Andreas.

Hausmann, Ricardo

TI Optimal Tax and Debt Policy with Endogenously Imperfect Creditworthiness. AU Aizenman, Joshua; Gavin,

Michael; Hausmann, Ricardo.

TI Budget Institutions and Fiscal Performance in Latin America. **AU** Alesina, Alberto; Hausmann, Ricardo; Hommes, Rudolf; Stein, Ernesto.

Havrylyshyn, Oleh

PD April 1997. **TI** Intra-Industry Trade of Arab Countries: An Indicator of Potential Competitiveness. **AU** Havrylyshyn, Oleh; Kunzel, Peter. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/47; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** C21, F13, F41, L23, O14. **KW** International Trade. Openness. European Union. Industrial Specialization. Arab Countries.

AB Recent and ongoing agreements to liberalize trade between the European Union (EU) and Arab countries raises the question as to how the latter will fare in a more competitive environment. This paper uses the Grubel-Lloyd intra-industry trade (IIT) index as an indicator of the degree of industrial specialization to study Arab countries' ability to compete in a more open trade setting. It concludes that, whereas increased specialization has been achieved over the last decade in Arab countries, IIT remains low not only in absolute terms, but also in a cross-country comparison, when normalized for the level of development.

Hay, Donald

TI Competition in Retailing: One Stop Shopping. **AU** Smith, Howard; Hay, Donald.

Hayashi, Fumio

TI The Effects of Income and Wealth on Time and Money Transfers Between Parents and Children. **AU** Altonji, Joseph G.; Hayashi, Fumio; Kotlikoff, Laurence J.

Head, Allen C.

TI Common and Country-Specific Fluctuations in Productivity, Investment, and the Current Account. **AU** Gregory, Allan W.; Head, Allen C.

Heckman, James J.

PD April 1996. **TI** What Do Bureaucrats Do? The Effects of Performance Standards and Bureaucratic Preferences on Acceptance Into the JTPA Program. **AU** Heckman, James J.; Smith, Jeffrey A.; Taber, Christopher. **AA** Heckman: University of Chicago and National Bureau of Economic Research. Smith: University of Western Ontario. Taber: Northwestern University. **SR** National Bureau of Economic Research Working Paper: 5535; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 18. **PR** \$5.00. **JE** D73, J31, J33. **KW** Cream Skimming. Job Training. Bureaucratic Performance.

AB Bureaucratic performance standards are featured in many proposals to increase efficiency in government. These standards reward bureaucrats on the basis of measured outcomes. The performance standard system created under the Job Training Partnership Act (JTPA) of 1982 is often cited as a successful prototype. Under the JTPA system, local training centers receive monetary rewards based on the employment levels and wage rates attained by their trainees upon completion of the

program. Critics of the JTPA performance standards system argue that it creates an incentive for program managers to encourage case worker to "cream-skim" the most employable applicants into the program. We examine this issue by analyzing the determinants of acceptance into JTPA among applicants at a training center for which we have data in everyone who applied over a two year period. We find that case workers prefer to accept the least employable applicants, rather than the most employable as suggested by the cream-skimming story. This evidence indicates that concerns about cream-skimming in JTPA may be exaggerated. Instead, the performance standards system may operate as a countervailing force against the preferences of case workers.

Helbling, Thomas

TI Growth, Investment, and Saving in the Arab Economies. **AU** Bisat, Amer; El-Erian, Mohamed; Helbling, Thomas.

TI Fiscal Policy and Growth in the Middle East and North Africa Region. **AU** Eken, Sena; Helbling, Thomas; Mazarei, Adnan.

Heller, Peter S.

PD January 1997. **TI** Fiscal Policy Management in an Open Capital Regime. **AA** International Monetary Funds. **SR** International Monetary Fund Working Paper: WP/97/20; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 32. **PR** not available. **JE** E61, E62, F32, F41, H62. **KW** Fiscal Policy. Globalization. Capital Flows.

AB This paper argues that as countries open their capital regimes, the appropriate fiscal stance should become more conservative than when capital is immobile. Further fiscal adjustment may be necessary in the face of large and volatile capital flows. However, the required changes would be smaller. If a fiscal response is unavoidable, some elements of fiscal policy are easier to manipulate and less distortionary than others. Determining the actual stance of fiscal policy is more difficult in an open capital regime, underscoring the need for transparency about fiscal rules. A more open capital environment also constrains the sustainable fiscal structure.

Henry, B.

TI Employment Determination in the UK Manufacturing Sector in the Presence of Variable Adjustment Costs: A Disaggregated Analysis. **AU** Greenstade, J.; Henry, B.; Lee, K.

Herguera, Inigo

TI International Leapfrogging and Subsidies. **AU** Lutz, Stefan; Herguera, Inigo.

Hernandez-Cata, Ernesto

PD April 1997. **TI** Liberalization and the Behavior of Output During the Transition From Plan to Market. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/53; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E22, E23, P21, P27, P52. **KW** Output. Liberalization. Transition Economies. Socialist System. Capital.

AB This paper deals with liberalization and the evolution of output during the transition from plan to market. It explains why strong liberalization leads to a comparatively steep fall in

output early in the transition, but a relatively strong recovery later on. Because it takes time to restructure the capital stock inherited from the old system, liberalization initially leads to transitional unemployment of capital and the contraction of the old enterprise sector. By making room quickly for the new, more efficient enterprises, however, liberalization also sets the stage for recovery and a much higher level of income in the medium term.

Hertel, Tom

TI Economic Growth and Policy Reform in the APEC Region: Trade and Welfare Implications by 2005. AU Anderson, Kym; Martin, Will; Hertel, Tom; Dimaranan, Betina.

Hertzenndorf, Mark N.

PD February 1996. TI A Game Theory Model of Celebrity Endorsements. AA Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 211; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Room 3110, Washington, D.C. 20580. PG 50. PR no charge. JE C72, D21, D82. KW Advertising. Game Theory. Celebrity. Signaling Games.

AB Since Milgrom and Roberts (1986) game theorists studying advertising have generally assumed that aggregate advertising expenditures are perfectly observed by consumers. Since in the real world consumers see only a small fraction of a firm's commercials and do not view the firm's total advertising expenditure, the firm has an incentive to make sure that each commercial has as much impact as possible. Using a signaling game this paper shows how a monopolist may attempt to balance the cost of production against the cost of air time to send a credible signal to consumers at the minimum possible cost. Several examples illustrate the extent to which extravagant production costs can substitute for additional spending on air time. Although it is the existence of signal loss that makes a multifaceted advertising signal attractive, greater signal loss does not necessarily lead to greater production expenditures.

Higgins, Matthew

PD May 1996. TI Asian Demography and Foreign Capital Dependence. AU Higgins, Matthew; Williamson, Jeffrey G. AA Higgins: Federal Reserve Bank of New York. Williamson: Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5560; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 37. PR \$5.00. JE J11. KW Youth Dependency. Demography. Asia.

AB Ansley Coale and Edgar Hoover were right about Asia. Rising fertility and declining infant mortality have had a profound impact of Asian savings, investment and foreign capital dependency since Coale and Hoover wrote in 1958. We argue that: Much of the impressive rise in Asian savings rates since the 1960's can be explained by the equally impressive decline in youth dependency burdens; Where Asia has kicked the foreign capital dependence habit is where youth dependency burdens have fallen most dramatically; Aging will not diminish Japan's capacity to export capital in the next century, but little of it will go to the rest of Asia since the rest will become net capital exporters, at least if demography is

allowed to have its way. These conclusions emerge from a model which rejects steady-state analysis in favor of transition analysis, and extends the conventional focus of the dependency rate literature on savings to investment and net capital flows.

Hines, James Jr.

PD May 1996. TI Tax Policy and the Activities of Multinational Corporations. AA Harvard University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5589; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 43. PR \$5.00. JE F13, H25, H87. KW Tax Policy. International Tax. Multinational Firms.

AB This paper reviews quantitative studies of the impact of international tax rules on the financial and real behavior of multinational firms. The evidence, much of it recent, indicates that taxation significantly influences foreign direct investment, corporate borrowing, transfer pricing, dividend and royalty payments, R&D activity, exports, bribe payments, and location choices. While taxes appear to influence a wide range of activity, the literature does not offer many subtle tests designed to distinguish different theories of the effects of taxation on multinational firms. The paper evaluates the reliability of existing evidence and its implications for the design of international tax policy.

Hoffmaister, Alexander W.

PD January 1997. TI Are Business Cycles Different in Asia and Latin America? AU Hoffmaister, Alexander W.; Roldos, Jorge E. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/09; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 33. PR not available. JE C32, E32, F10, F31, F41. KW Asia. Latin America. Business Cycles. Vector Autoregression. Time Series.

AB This paper compares business cycles in Asia and in Latin America using structural vector autoregression analysis with panel data. The evidence for countries in these regions suggests that (i) the main source of output fluctuations is supply shocks, even in the short run; (ii) the real exchange rate is driven mostly by fiscal shocks; and (iii) terms of trade shocks are important for trade balance fluctuations but not for output or real exchange rate fluctuations. However, in Latin America, as opposed to Asia, output is affected more by external and domestic demand shocks.

PD July 1997. TI Macroeconomic Fluctuations in Sub-Saharan Africa. AU Hoffmaister, Alexander W.; Roldos, Jorge E.; Wickham, Peter. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/82; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 24. PR not available. JE C32, E32, F10, F31, F41. KW Business Cycles. Exchange Arrangements. Exchange Rates. Africa. Terms of Trade.

AB The sources of macroeconomic fluctuations in sub-Saharan Africa are examined by comparing the CFA franc countries with the non-CFA franc countries. External shocks, especially terms of trade shocks, appear to have a greater influence on fluctuations of output and the real exchange rate in CFA franc countries. This result does not appear to be associated with differences in the economic structure but may reflect the fixed exchange rate regime, which does not (partially) buffer these countries from external shocks.

Macroeconomic fluctuations in non-CFA franc countries are similar to those in other developing countries, particularly in Latin America.

Holzer, Harry

PD June 1996. TI Are Affirmative Action Hires Less Qualified? Evidence from Employer- Employee Data On New Hires. AU Holzer, Harry; Neumark, David. AA Holzer: Michigan State University. Neumark: Michigan State University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5603; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 32. PR \$5.00. JE E24, J15, J16, J23, J71. KW Affirmative Action. Employment. Discrimination.

AB This paper uses micro-level data on employers and employees to investigate whether Affirmative Action procedures lead firms to hire minority or female employees who are less qualified rather than workers who might otherwise be hired. Measures of qualifications include the educational attainment of the workers hired, skill requirements of the job, and a variety of outcome measures that are presumably related to worker performance on the job. The analysis is based on a representative sample of over 3,200 employers in four major metropolitan areas in the U.S. Results show some evidence of lower educational qualifications among blacks and Hispanics hired under Affirmative Action, but not among white women. Further, the results show little evidence of substantially weaker job performance among most groups of minority and female Affirmative Action hires.

Hommes, Rudolf

TI Budget Institutions and Fiscal Performance in Latin America. AU Alesina, Alberto; Hausmann, Ricardo; Hommes, Rudolf; Stein, Ernesto.

Honohan, Patrick

PD May 1997. TI Contrasting Monetary Regimes in Africa. AU Honohan, Patrick; O'Connell, Stephen A. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/64; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 41. PR not available. JE E42, E52, O23. KW Africa. Monetary Policy. Central Banks. Monetary Regimes.

AB In post-independence sub-Saharan Africa, institutional arrangements for monetary policy have taken a variety of forms, although the historical evolution of many African financial systems has been similar. This paper identifies five different regimes and examines how they evolved over time. It focuses on how the alternative institutional arrangements have influenced the performance of monetary policy under fiscal pressure, and concludes that, although the trend appears to be toward more flexible regimes, the transition to greater flexibility can exacerbate problems of credibility and of macroeconomic management.

Hosken, Daniel

TI Are Retailing Mergers Anticompetitive? An Event Study Analysis. AU Simpson, John David; Hosken, Daniel.

Howells, Jeremy

PD March 1997. TI Technological Competitiveness in an International Arena. AU Howells, Jeremy; Michie, Jonathan. AA University of Cambridge. SR University of Cambridge, ESRC Centre for Business Research Working Papers: WP52; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. Website: www.econ.cam.ac.uk/dae. PG 17. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE F20, O32, O33, O38. KW Technological Change. Globalization. Technology. Technological Globalization.

AB The authors propose that there are three elements to technological globalization. First, there is the geographical extent in terms of the spatial spread and intensity (or "depth") of the globalization of technology. Second, there are sectoral variations in the degree of technological globalization. Lastly, there is the issue of the temporal extent of the globalization of technology. The authors analyze global technological competitiveness within this framework, exploring the policy implications for supranational, national and regional policy-makers, and discuss in particular what key ingredients national governments should focus on to create a successful environment for growth in a global economy.

Huaibin, Jia

TI Chinese Rural Migrants in Urban Enterprises: Three Perspectives. AU Knight, John; Song, Lina; Huaibin, Jia.

Hulten, Charles R.

PD May 1996. TI Quality Change in Capital Goods and its Impact on Economic Growth. AA University of Maryland and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5569; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 40. PR \$5.00. JE E22, O14. KW Solow Paradox. Solow Residual. Technical Change.

AB This paper argue that productivity puzzles like the Solow Paradox arise, in part, from the omission of an important dimension of the debate: the resource cost of achieving a given rate of technical change. A remedy is proposed in which a new parameter, defined as the cost elasticity of producing capital with respect to the rate of technical change, is introduced. This parameter is shown to be latent in the Hall- Jorgenson user-cost of capital, as well as in the Solow residual. It is also shown that an increase in the rate of embodied technical change may actually cause a decrease in the Solow residual, in the short run, if the parameter is greater than the ratio of the user cost to the corresponding asset price. Different values of the new parameter also correspond to different theories of technological innovation: the Solow- Swan and Cass-Koopmans assumption of costless technical change is consistent with a zero value of the cost elasticity parameter, while the model of endogenous growth with R&D externalities implies a larger value. Finally, the appropriate investment-good price deflator is shown to be a function of the cost-elasticity.

Hunt, Jennifer

PD January 1997. TI Has Work Sharing Worked in Germany? AA Yale University. SR Centre for Economic Policy Research Discussion Paper: 1553; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X

ILB, United Kingdom. PG 44. PR 4 pounds or \$8.00. JE J23, J51. KW Germany. Employment. Hours. Unions. Work-Sharing.

AB Starting in 1985, (West) German unions began to reduce standard hours on an industry-by-industry basis in an attempt to lower unemployment. Whether "work-sharing" works -- whether employment rises when hours per worker are reduced -- is theoretically ambiguous. I test this using both individual data from the German Socio-Economic Panel and industry data to exploit the cross-section and time-series hours variation. For the 1984-9 period, I find that, in response to a one-hour fall in standard hours, employment rose by 0.3-0.7%, but that total hours worked fell by 2-3%, implying possible output losses. As a group, however, workers were better off as the wage bill rose. The employment growth implied by the mean standard hours decline, at most 1.1%, was not enough to bring German employment growth close to the U.S. rate. Results for the 1990-94 period were more pessimistic.

Hurst, Peter J.

TI The 1995 NRC Ratings of Doctoral Programs: A Hedonic Model. AU Ehrenberg, Ronald G.; Hurst, Peter J.

Husain, Aasim

TI Debt Reduction and New Loans: A Contracting Perspective. AU Carlson, John; Husain, Aasim; Zimmerman, Jeffrey.

Hyslop, Dean

TI Does Inflation "Grease the Wheels of the Labor Market"? AU Card, David; Hyslop, Dean.

Imrohoroglu, Ayse

PD November 1996. TI On the Political Economy of Income Distribution and Crime. AU Imrohoroglu, Ayse; Merlo, Antonio; Rupert, Peter. AA Imrohoroglu: University of Southern California. Merlo: University of Minnesota and Federal Reserve Bank of Minneapolis. Rupert: Federal Reserve Bank of Cleveland. SR University of Minnesota Center for Economic Research Discussion Paper: 291; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 38. PR no charge. JE D72, D78, H50, I38, K42. KW Property Crime. Redistribution. Voting. General Equilibrium. Welfare.

AB In this paper we consider a general equilibrium model where heterogeneous agents specialize either in legitimate market activities or in criminal activities and majority rule determines the share of income redistributed and the expenditures devoted to the apprehension of criminals. We calibrate our model to the U.S. economy in 1990, and we conduct simulation exercises to evaluate the effectiveness of expenditures on police protection and income redistribution at reducing crime. We find that while expenditures on police protection reduce crime, it is possible for the crime rate to increase with redistribution. We also show that economies that adopt relatively more generous redistribution policies may have either higher or lower crime rates than economies with relatively less generous redistribution policies, depending on the characteristics of their wage distribution and on the efficiency of their apprehension technology.

Inman, Robert P.

TI Balanced Budget Rules and Public Deficits: Evidence from the U.S. States. AU Bohn, Henning; Inman, Robert P.

Iqbal, Zubair

PD January 1997. TI External Stability Under Alternative Nominal Exchange Rate Anchors: An Application to the GCC Countries. AU Iqbal, Zubair; Erbas, S. Nuri. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/08; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 18. PR not available. JE F10, F31, F32, F41. KW Exchange Rates. Current Account. International Trade. External Stability.

AB Import and export stability is examined under two alternative nominal exchange rate anchors, the U.S. dollar and the SDR. Stability under the two pegs depends critically on import and export elasticity with respect to exchange rates. The implications of import and export elasticity for an optimal currency basket are also explored. The elasticity estimates for the GCC countries suggest that the SDR peg may not outperform the dollar peg in improving external stability. Nevertheless, switching to some other nominal exchange rate anchor may improve external stability, a possibility that remains to be explored.

Irmen, Andreas

PD April 1997. TI Attribute Dependence and the Provision of Quality. AU Irmen, Andreas; Degryse, Hans. AA Irmen: Universite de Lausanne. Degryse: Tilburg University. SR Centre for Economic Policy Research Discussion Paper: 1635; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 23. PR 4 pounds or \$8.00. JE D21, L15. KW Competitive Positioning. Quality Standards. Product Differentiation.

AB A quality improvement often necessitates modifications of varietal product features. This paper studies firms' incentives to provide quality when this decision affects the goods' degree of horizontal differentiation. Intuitively, one is inclined to argue that private incentives to provide quality are insufficient relative to the social optimum if a quality improvement reduces horizontal differentiation. We find that this argument depends on whether the game is simultaneous or sequential. In the former case private incentives prove excessive relative to the social optimum, and in the latter case, insufficient. As a result, a regulator might want to impose either minimum or maximum quality standards.

Irwin, Douglas A.

PD March 1996. TI The Smoot-Hawley Tariff: A Quantitative Assessment. AA University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5509; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 18. PR \$5.00. JE F13, N42, N72. KW Smoot-Hawley Tariff. Imports.

AB In the two years after the imposition of the Smoot-Hawley tariff in June 1930, the volume of U.S. imports fell over 40 percent. To what extent can this collapse of trade be attributed to the tariff itself versus other factors such as declining income or foreign retaliation? Partial and general

equilibrium assessments indicate that the Smoot-Hawley tariff itself reduced imports by 4-8 percent (*ceteris paribus*), although the combination of specific duties and deflation further raised the effective tariff and reduced imports an additional 8-10 percent. A counter-factual simulation suggests that nearly a quarter of the observed 40 percent decline in imports can be attributed to the rise in the effective tariff, (i.e., Smoot-Hawley plus deflation).

PD March 1996. **TI** Log-Rolling and Economic Interests in the Passage of the Smoot-Hawley Tariff. **AU** Irwin, Douglas A.; Kroszner, Randall S. **AA** Irwin: University of Chicago and National Bureau of Economic Research. Kroszner: University of Chicago. **SR** National Bureau of Economic Research Working Paper: 5510; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** D72, F13, N42. **KW** Smoot-Hawley Tariff. Voting.

AB The authors analyze Senate roll-call votes concerning tariffs on specific goods in order to understand the economic and political factors influencing the passage of the Smoot-Hawley Tariff Act of 1930. Contrary to recent studies emphasizing the partisan nature of the Congressional votes, our reading of the debates in the Congressional Record suggests that the final, party-line voting masks a rich vote-trading dynamic. We estimate a logit model of specific tariff votes that permits us to identify (a) important influences of specific producer beneficiaries in each Senator's constituency and (b) log-rolling coalitions among Senators with otherwise unrelated constituency interests which succeed in raising tariff rates.

TI The Role of History in Bilateral Trade Flows. **AU** Eichengreen, Barry; Irwin, Douglas A.

Isaac, Mark R.

TI Experiments with the Pivot Process for Providing Public Goods. **AU** Attiyeh, Greg; Franciosi, Robert; Isaac, Mark R.

Iyer, Sridhar

PD January 1997. **TI** A Qualitative Response Model of Interest Rate Regimes. **AU** Iyer, Sridhar; Andrews, Rick L. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 97/02; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 16. **PR** not available. **JE** C51, E42, E43. **KW** Probabilistic Choice. Interest Rates. Regime Shifts. State Space Framework. Qualitative Response.

AB In this paper we develop a new approach to modeling stochastic regime shifts with an application to nominal interest rates. Our approach uses a qualitative response model to predict the dominant regime at any given time period. The model provides a flexible and simple method for determining how many distinct regimes describe a time series over the length of the series and which regime best describes the behavior of the series at any given time. Results show that the behavior of the three-month U.S. treasury bill rate is adequately explained by a mixture of three regimes, each with a different slope for the trend and a different variance.

PD June 1997. **TI** Dynamic Factor Analysis, Interest Rate Regimes, and Excess Treasury Bill Returns. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 97/06; College of Business and Economics, Department of Economics, University of Delaware,

Newark, Delaware 19716-2720. **PG** 18. **PR** not available. **JE** E42, E43, G10. **KW** Factor ARCH. Regime Change. Treasury Bills. Yield Spread. Excess Returns.

AB In this paper, I extend the Factor-ARCH model for U.S. treasury bills returns to include an observable bill factor derived from yield spreads. I also identify changes in regimes and investigate their effects on the impact of the bill factor on returns. Results from estimation show that the bill factor has a significant effect on risk premiums in Treasury bill returns, a mixture of regimes with different variances explains the behavior of yield spread innovations better, and regime changes have no effect on the importance of the yield spread factor.

Izvorski, Ivailo

PD July 1997. **TI** Recovery Ratios and Survival Times for Corporate Bonds. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/84; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** G10, G32, G33. **KW** Corporate Default. Recovery Ratio. Survival Time. Corporate Bonds.

AB This paper analyzes the determinants of the recovery ratios and survival times (time until default) for U.S. corporate bonds. We show that seniority, the type of industry in which the firm operates, and the types of restructuring attempted after default are the major determinants of the cross-sectional distribution of individual bond recovery ratios. On an industry level, physical asset obsolescence, industry growth, and industry concentration are the most important factors. We also analyze survival times for corporate bonds and find that initial time to maturity and the general economic conditions at maturity and default explain a large fraction of the cross-sectional variation of survival times.

Jackson, Matthew

TI Bid-Ask Spreads with Indirect Competition Among Specialists. **AU** Gehrig, Thomas; Jackson, Matthew.

Jadresic, Esteban

PD May 1997. **TI** What Type of Contracts Underlie Aggregate Wage Dynamics? **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/67; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 28. **PR** not available. **JE** E24, E30, J23, J31, J41. **KW** Wages. Contracts. Phillips Curve. Chile. Unemployment.

AB This paper shows that it is possible to estimate the importance of different types of wage contracts at the aggregate level using the same data used to estimate standard Phillips curves. It finds that the behavior of the Chilean private aggregate wage during the 1980's is well described by two-year contracts that are revised every six months according to 100 percent of past inflation. The estimates also show that the unemployment rate was a strong determinant of the contract's target real wage and that most wage negotiations were carried through during the first half of every year. The results prove robust to a variety of tests and fit the data better than standard Phillips curves.

Jaffe, Adam B.

TI Bounding the Effects of R&D: An Investigation Using Matched Establishment-Firm Data. **AU** Adams, James D.; Jaffe, Adam B.

PD April 1996. **TI** Environmental Regulation and Innovation: A Panel Data Study. **AU** Jaffe, Adam B.; Palmer, Karen. **AA** Jaffe: Brandeis University and National Bureau of Economic Research. Palmer: Resources for the Future. **SR** National Bureau of Economic Research Working Paper: 5545; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** O31, Q28. **KW** Environmental Regulation. Innovation. Compliance.

AB In a 1991 essay in *Scientific American*, Michael Porter suggested that environmental regulation may have a positive effect on the performance of domestic firms relative to their foreign competitors, by stimulating domestic innovation. We examine the stylized facts regarding environmental expenditures and innovation in a panel of manufacturing industries. We find that lagged environmental compliance expenditures have a significant positive effect on R&D expenditures when we control for unobserved industry-specific effects. We find little evidence, however, that industries' inventive output (as measured by successful patent applications) is related to compliance costs.

Jappelli, Tullio

PD March 1997. **TI** Using Subjective Income Expectations to Test for Excess Sensitivity of Consumption to Predicted Income Growth. **AU** Jappelli, Tullio; Pistaferri, Luigi. **AA** Jappelli: Università di Salerno. Pistaferri: University College London. **SR** Centre for Economic Policy Research Discussion Paper: 1617; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 23. **PR** 4 pounds or \$8.00. **JE** E21. **KW** Euler Equations. Excess Sensitivity. Subjective Expectations.

AB We test for excess sensitivity of consumption to predicted income growth using a 1989-93 panel survey of Italian households that includes measures of subjective income and inflation expectations. These expectations provide a powerful instrument for predicting income growth. Controlling for the expected variance of consumption growth and for predictable changes in labor supply, we find that household consumption growth is very strongly correlated with predicted earnings growth of the head. We also find considerable evidence that excess sensitivity is due to liquidity constraints. Our strongest result is that in a sample of low-asset households the coefficient of expected income increases is one, while that of expected income declines is zero.

Jarvis, Sarah

PD November 1997. **TI** Child Poverty, Economic Transition and Welfare State Regimes. **AU** Jarvis, Sarah; Redmond, Gerry. **AA** Jarvis: University of Essex. Redmond: University of Cambridge. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9624; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 21. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** D31, I32, I38. **KW** Poverty. Social Policy. United Kingdom. Hungary. Survey.

AB The authors compare the incidence of and characteristics associated with child poverty in the UK and Hungary in 1993. Using a model families approach, the differences between systems of state support for families with and without children

are examined, and conclusions drawn about their orientations towards the welfare of women and children. The outcomes of these different orientations are then tested empirically by analyzing microdata from household budget surveys in the UK and Hungary. Results from the model families analysis and the microdata analysis are largely consistent, and show that families with children in Hungary are less likely to fall into poverty than their counterparts in the UK.

Jbili, Abdelali

PD July 1997. **TI** Financial Sector Reforms in Algeria, Morocco, and Tunisia: A Preliminary Assessment. **AU** Jbili, Abdelali; Enders, Klaus; Treichel, Volker. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/81; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** E21, E44, E52, G21, N27. **KW** Africa. Banking System. Financial Markets. Savings.

AB This paper reviews and assesses the financial sector reforms in Algeria, Morocco and Tunisia. After a description of the financial sector before reforms, it explains the main features of the comprehensive reform process in each country. It also reviews the sequencing of reforms and discusses econometric evidence of the impact of the reforms on saving in each of the three countries. Subsequently, the paper sets out remaining issues to be addressed in the three countries, including a further strengthening of the banking system and development of financial instruments and markets.

Jensen, Henrik

TI Inflation Targets and Contracts with Uncertain Central Banker Preferences. **AU** Beetsma, Roel M. W. J.; Jensen, Henrik.

Jin, Xing

PD September 1996. **TI** The Existence of Equilibrium in a Financial Market with Transaction Costs. **AU** Jin, Xing; Milne, Frank. **AA** Jin: Academia Sinica. Milne: Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 934; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 22. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** C62, D51, G10. **KW** Arbitrage. General Equilibrium. Transaction Costs. Finite P-Convexity.

AB This paper proves the existence of a general equilibrium in a financial model with transaction costs. The general equilibrium is shown to exist in a model with convex trading technology, in which the agents include consumers, production firms, brokers and dealers. When the trading technology is non-convex, an individual approximate equilibrium, introduced by Heller and Starr (1976), is proved in the above model. And, moreover, under a further assumption of finite p-convexity on the commodity excess demand correspondence, the general equilibrium for a non-convex exchange economy is obtained for an economy with consumers, brokers and dealers.

PD January 1997. **TI** The Existence of Equilibrium in a Financial Market with General Personal and Corporate Tax Structures. **AU** Jin, Xing; Milne, Frank. **AA** Jin: Academia Sinica. Milne: Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 939; Department of Economics, Institute for Economic Research, Queen's University Kingston, Ontario, K7L 3N6, Canada. Website:

qed.econ.queensu.ca/pub/paper. PG 23. PR \$3.21 Canada; \$3.50 U.S. and Foreign. JE D50, G10, H20. KW General Equilibrium. Financial Markets. Taxation. Two-Period Model. Arbitrage.

AB This paper concerns the existence of equilibrium in a two-period model with general personal and corporate tax structures. The authors show that an equilibrium exists if there is a price system under which no consumer or firm has an arbitrage opportunity. The model can be modified to handle non-convex tax structures and capital gains.

Johnson, Richard

PD June 1996. **TI** Age Discrimination, Job Separations, and Employment Status of Older Workers: Evidence from Self-Reports. **AU** Johnson, Richard; Neumark, David. **AA** Johnson: Rutgers University. Neumark: Michigan State University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5619; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** J31, J63, J71. **KW** Age Discrimination. Employment.

AB This paper explores the prevalence and consequences of age discrimination in the workplace by analyzing self-reports of discrimination by respondents in the National Longitudinal Survey of Older Men. Age discrimination was reported in seven percent of the cases considered, during the period 1966-1980. Workers with positive reports were much more likely to separate from their employer and less likely to remain employed than workers who report no age discrimination. The estimated effect of reported discrimination remains large and significant even when controlling for the existence of mandatory retirement provisions on the current job. These findings are generally robust to numerous attempts to correct the estimates for the inherent limitations of self-reported data and the possibility that discrimination is reported in response to other negative labor market outcomes.

Johnston, Louis

TI Real Exchange Rate Levels, Productivity and Demand Shocks: Evidence from a Panel of 14 Countries. **AU** Chinn, Menzie; Johnston, Louis.

Johnston, R. Barry

PD August 1997. **TI** Some Evidence on Exchange Rate Determination in Major Industrial Countries. **AU** Johnston, R. Barry; Sun, Yan. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/98; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 30. **PR** not available. **JE** E32, F31, F47. **KW** Exchange Rates. Foreign Exchange. Random Walk.

AB This paper examines the role of long-run monetary and cyclical factors in determining exchange rate movements. Results of empirical study using a data set that includes Canada, Germany, Japan, the United Kingdom, and the United States support the view that exchange rate movements can be explained by the efficient or rational adjustment of foreign exchange markets to economic fundamentals. In the long run, the exchange rate is determined consistent with a monetary approach to exchange rates, while cyclical factors have an impact on short-run exchange rate dynamics. Estimated equations outperform random walk models of exchange rates.

Kaestner, Robert

PD April 1996. **TI** Are Brothers Really Better: Sibling Sex Composition and Educational Achievement Revisited. **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5521; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** I21, J16, J24. **KW** Sex Composition. Sibling Achievement. Educational Attainment.

AB In this paper, I examine the relationship between sibling sex composition and educational achievement. First, I replicate the study of Butcher and Case (1994) using data on a more recent birth cohort. Contrary to the finds of that study, I find basically no effect of sibling sex composition on the educational attainment of white males or females, although among black adults, those who grew up with a sister, or who had relatively more sisters, had greater levels of educational attainment than persons with no or fewer sisters. Second, I broaden the analysis by examining the educational outcomes of children and teenagers. This extension is important because it provides an additional opportunity to test for sibling sex composition effects, and it helps differentiate between potential causes of a sibling sex composition effect. The results obtained from the analysis of child and teen outcomes suggest that sibling sex composition had little effect on educational achievement. The only group to be affected was black teens between the age of 15 and 18. Those who grew up with sisters had higher education achievement levels than those who grew up with brothers.

PD April 1996. **TI** Drug Use and AFDC Participation: Is There a Connection? **AA** National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5555; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 21. **PR** \$5.00. **JE** I12, I38. **KW** Drug Use. Welfare. AFDC.

AB Drug use and welfare are two serious social problems that have received widespread public attention. Recently, it has been suggested that illicit drug use is a major cause of welfare, although there is only anecdotal evidence to support such a claim. This paper provides the first systematic analysis of the issue by examining the relationship between illicit drug use and welfare participation among a nationally representative sample of young adults. The results indicate that past year drug use, predominantly marijuana use, is positively related to future welfare participation for both non-black and black women. The magnitude of the drug effect, however, is modest: if drug use among welfare participants was reduced to the levels of non-participants, welfare participation would decline by approximately one percent.

Kalat, Karen L.

TI Deducing Implications of Fitness Maximization When a Tradeoff Exists Among Alternative Currencies. **AU** Salant, Stephen; Kalat, Karen L.; Wheatcroft, Ana-Maria.

Kaminsky, Graciela

PD July 1997. **TI** Leading Indicators of Currency Crises. **AU** Kaminsky, Graciela; Lizondo, Saul; Reinhart, Carmen. **AA** Kaminsky: Board of Governors of the Federal Reserve System. Lizondo: International Monetary Fund and the World Bank. Reinhart: University of Maryland. **SR** International Monetary Fund Working Paper: WP/97/79; International

Monetary Fund, 700 19th Street, Washington, DC 20431. PG 21. PR not available. JE E52, F31, F47. KW Currency Crises. Leading Indicators. Exchange Rates. Foreign Exchange.

AB This paper examines the empirical evidence on currency crises and proposes a specific early warning system. This system involves monitoring the evolution of several indicators that tend to exhibit an unusual behavior in the periods preceding a crisis. When an indicator exceeds a certain threshold value, this is interpreted as a warning "signal" that a currency crisis may take place within the following 24 months. The variables that have the best track record within this approach include exports, deviations of the real exchange rate from trend, the ratio of broad money to gross international reserves, output, and equity prices.

Kane, Thomas

TI Roc V. Wade and American Fertility. **AU** Levine, Phillip; Kane, Thomas; Staiger, Douglas; Zimmerman, David.

Kapur, Ishan

TI Towards a Market Economy: Structures of Governance. **AU** Dhonte, Pierre; Kapur, Ishan.

PD June 1997. **TI** External Borrowing by the Baltics, Russia and Other Countries of the Former Soviet Union: Developments and Policy Issues. **AU** Kapur, Ishan; van der Mensbrugge, Emmanuel. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/72; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 19. PR not available. JE F34, H63, O16, O19, O23. KW External Financing. External Debt. Capital Markets. Financial Stabilization. Russia.

AB Many countries among the Baltics, Russia and other CIS states are increasingly borrowing on international capital markets, a development that generally reflects their success in achieving financial stabilization. In view of the low level of domestic saving and large capital requirements, recourse to foreign borrowing may of course generate significant benefits for these economies in transition. However, the rapid increase in external debt suggests that consideration also needs to be given to the risks from too high a dependence on foreign saving, including inter alia risk of the postponement of needed structural reforms.

Karp, Larry

PD March 1997. **TI** Common Ground Between Free-Traders and Environmentalists. **AU** Karp, Larry ; Sacheti, Sandeep; Zhao, Jinhua. **AA** University of California, Berkeley. **SR** Centre for Economic Policy Research Discussion Paper: 1598; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 33. PR 4 pounds or \$8.00. JE D50, F10, O20, Q20. KW General Equilibrium. International Trade. Environmental Management.

AB We use a North-South model with property right differences and resource dynamics to study the effects of trade on resource use and welfare. Autarky is likely to Pareto-dominate free trade in the long run when the environment is quite fragile, and the result is reversed when the environment is quite resilient. Trade may cause an environmentally poor country to "drag down" its richer trading partner, or cause both countries to degrade their stocks when these would be preserved under autarky. Alternatively, trade may enable the

environmentally richer country to "pull up" its partner or cause both countries to preserve their stocks when these would be degraded under autarky. These results rationalize the positions of environmentalists and free-traders. The direction of trade may change over time, but in steady states it is either inefficient or indeterminate. In the former case a switch to autarky would increase global welfare.

Keeble, David

PD March 1997. **TI** Internationalization Processes, Networking and Local Embeddedness in Technology-Intensive Small Firms. **AU** Keeble, David; Lawson, Clive; Lawton Smith, Helen; Moore, Barry; Wilkinson, Frank. **AA** Keeble, Lawson, Moore, and Wilkinson: University of Cambridge. Lawton Smith: University of Oxford and University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP53; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. Website: www.econ.cam.ac.uk/dae. PG 19. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE L11, L63, O18, O31, O32. KW Technological Firms. Internationalization. Small Firms. United Kingdom.

AB This paper argues that technology-intensive small firms often need to internationalize their activities, especially sales, at a very early stage of their development because of the limited and global nature of the technological market niche which they have been set up to exploit. From a survey of 100 such firms in the Cambridge and Oxford regions, this paper demonstrates that many technology-based smaller firms are engaged in a range of international networks and internationalization processes, while firms reporting high levels of internationalization differ significantly from those which are more nationally-oriented, for example in terms of size, age, research intensity, university links, and innovativeness. In addition, successful internationalization appears to be grounded or embedded in successful local networking and research and technology collaboration.

Kehoe, Patrick J.

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

Kerschbamer, Rudolf

PD May 1997. **TI** Excess Capacity as an Incentive Device. **AU** Kerschbamer, Rudolf; Tournas, Yanni. **AA** Kerschbamer: Universitat Wien. Tournas: Rutgers University. **SR** Centre for Economic Policy Research Discussion Paper: 1625; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 25. PR 4 pounds or \$8.00. JE D82, L22, L23. KW Multiplant Firm. Excess Capacity. Asymmetric Information.

AB This paper studies the factors determining plant size and interplant output allocation within the boundaries of a multiplant firm under conditions of demand uncertainty. It shows that asymmetric information between headquarters and individual plants is one factor determining plant size and output allocation: since the existence of excess capacity creates "high powered" incentives for individual plants, capacity levels in a second-best setting exceed the corresponding benchmark in a first-best world if capacity prices are low. The presence of

"agency costs" in the case of fully-utilized capacity reverses this result for high- capacity prices. Also, in a recession output is not necessarily assigned to the plant with the lowest production costs.

Khan, M. Ali

TI Institutional Development: Skill Transference Through a Reversal of "Human Capital Flight" or Technical Assistance. **AU** Haque, Nadeem; Khan, M. Ali.

Khan, Mohsin S.

TI Patterns of Capital Flows to Emerging Markets: A Theoretical Perspective. **AU** Chen, Zhaohui; Khan, Mohsin S.

Kim, Seongjun

TI R&D, Production Structure and Productivity Growth: A Comparison of the US, Japanese, and Korean Manufacturing Sectors. **AU** Nadiri, M. Ishaq; Kim, Seongjun.

Kimura, Fukunari

TI Measuring U.S. International Goods and Services Transactions. **AU** Baldwin, Robert E.; Kimura, Fukunari.

King, Robert G.

PD March 1996. **TI** Inflation Targeting in a St. Louis Model of the 21st Century. **AU** King, Robert G.; Wolman, Alexander L. **AA** King: University of Virginia and National Bureau of Economic Research. Wolman: Federal Reserve Bank of Richmond. **SR** National Bureau of Economic Research Working Paper: 5507; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** E31, E52, E58. **KW** Inflation Targeting.

AB Inflation targeting is a monetary policy rule that has implications for both the average performance of an economy and its business cycle behavior. We use a modern, rational expectations model to study the twin effects of this policy rule. The model highlights forward-looking consumption and labor supply decisions by households and forward-looking investment and price-setting decisions by firms. In it, monetary policy has real effects because imperfectly competitive firms are constrained to adjust prices only infrequently and satisfy all demand at posted prices. In this "sticky price" model, there are also effects of the average rate of inflation on the amount of time that individuals must devote to shopping activity and on the average markup of price over cost that firms can charge. However, in terms of the welfare effects of long- run inflation, it is optimal to set monetary policy so that the nominal interest rate is close to zero, replicating in an imperfectly competitive model the result that Friedman found under perfect competition. Under a perfect inflation target, the monetary authority makes the money supply evolve so a model with sticky prices behaves much like one with flexible prices.

Kiyotaki, Nobuhiro

PD April 1996. **TI** Business Fixed Investment and the Recent Business Cycle in Japan. **AU** Kiyotaki, Nobuhiro; West, Kenneth D. **AA** Kiyotaki: University of Minnesota and National Bureau of Economic Research. West: University of Wisconsin and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5546; National Bureau of Economic Research, 1050

Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 30. **PR** \$5.00. **JE** E22, E32. **KW** Fixed Investment. Business Cycle. Japan.

AB To analyze business fixed investment in Japan, which has been unusually volatile in recent years, we develop and apply a loglinear flexible accelerator model. We find that movements in business fixed investment are consistent with movements in output and the tax-adjusted cost of capital, both on average during our entire 1961-94 sample and during the recent 1986-94 business cycle.

Klein, Michael

TI A Provincial View of Economic Integration. **AU** Bayoumi, Tamim; Klein, Michael.

Kleit, Andrew W.

TI The Political Economy of Federal Trade Commission Administrative Decision Making in Merger Enforcement. **AU** Coate, Malcolm B.; Kleit, Andrew W.

Klemperer, Paul

TI The Generalized War of Attrition. **AU** Bulow, Jeremy; Klemperer, Paul.

Klibanoff, Peter

PD May 1996. **TI** Investor Reaction to Salient News in Closed-End Country Funds. **AU** Klibanoff, Peter; Lamont, Owen; Wizman, Thierry. **AA** Klibanoff: Northwestern University. Lamont: University of Chicago and National Bureau of Economic Research. Wizman: Strategic Investment Partners, Inc. **SR** National Bureau of Economic Research Working Paper: 5588; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** G12, G14. **KW** Finance. Fund Pricing. Expectations. Fundamentals. Investor Reaction.

AB The authors provide a model of closed-end fund pricing which includes investors who do not form expectations correctly and allows for salient country-specific news to affect this expectation formation process. They use panel data on prices and net asset values of closed-end country funds to examine investor reaction to news that affects fundamentals, and measure the response of the idiosyncratic change in fund prices to the idiosyncratic change in fund asset values. In a typical week, U.S. prices under react to changes in foreign fundamentals; the (short-run) elasticity of price with respect to asset value is significantly less than one. In weeks with major news (relevant to the specific country), prices react much more to fundamentals. These results are roughly consistent with the hypothesis that major news events lead some investors who normally lag behind in updating their expectations to temporarily react more quickly.

Knight, John

PD October 1996. **TI** Chinese Peasant Choices: Farming, Rural Industry or Migration. **AU** Knight, John; Song, Lina. **AA** Oxford University. **SR** Oxford Applied Economics Discussion Paper Series: 188; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 28. **PR** 2 pounds. **JE** J24, J31, J62, O18, R23. **KW** China. Development. Labor Allocation. Labor Productivity.

AB A nationally representative rural labor force survey of China is analyzed to explore the allocation of labor among farming, local non-farming and temporary migration activities. The returns to non-farming greatly exceed those to farming, for reasons which are explored. Unconstrained and constrained choices are modelled theoretically, and empirical estimates are made of the personal and household determinants of activities and of the days worked in these activities. Not only the preferences of workers but also their productive characteristics and the opportunities available to them are found to be relevant. There is evidence that peasants are constrained in their choice of non-farming activities. These constraints reflect restricted access, imperfect information and risk, and transaction costs. The loosening of constraints is important for rural development in China.

PD January 1997. **TI** Chinese Rural Migrants in Urban Enterprises: Three Perspectives. **AU** Knight, John; Song, Lina; Huaibin, Jia. **AA** Oxford University. **SR** Oxford Applied Economics Discussion Paper Series: 190; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 21. **PR** 2 pounds. **JE** E24, J31, J61, O15, R35. **KW** Migrant Labor. China. Labor Productivity. Employment.

AB A survey of rural migrants employed in enterprises in four Chinese cities is analyzed to answer the following questions. Are the productive characteristics of migrants rewarded in the urban labor market? How do migrants compare with non-migrants in their productive characteristics, occupational attainment and pay? Do migrants have an incentive to remain with the enterprise and in the city, and what factors influence these attitudes? What determines the extent of migrant employment? Do enterprises have an incentive to employ more migrants, and how do they value migrants relative to non-migrants? How does policy influence migration: does government impede or encourage the flow of temporary migrants? Thus the process of migration is analyzed from three perspectives: that of the rural migrants themselves, of their urban employers, and of the government. The survey results are combined with macroeconomic projects to consider the future of migration in China.

Koch, Manfred

PD January 1997. **TI** From Generosity to Sustainability: The Austrian Pension System and Options for its Reform. **AU** Koch, Manfred; Thimann, Christian. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/10; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 28. **PR** not available. **JE** G23, H55. **KW** Austria. Public Pensions. Pension Plans. Social Insurance.

AB Austria has probably the world's highest pension expenditures relative to its economic size, largely because of the generosity of its pension system. This paper examines the institutional setup of the Austrian pension system and projects its future development based on current policies. The projection results show a swift financial worsening. With the already high level of contribution rates, pension expenditures, and budget transfers, the results underscore the need for reform. Much of this reform can, however, be achieved by maintaining the structure of the system and adjusting some of its key parameters. The paper outlines options for such a reform.

Koford, Kenneth

TI Effective Management: Interviews With Firms Having Traditional, Decentralized and Participatory Management, and a Proposal: Integrated Management. **AU** Banschbach, Chris; Koford, Kenneth.

PD February 1997. **TI** Monitoring in Organizations When Agents Vary in Ethical Standards. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 97/03; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 27. **PR** not available. **JE** D82, J31, J41, J50. **KW** Agency Problems. Shirking. Contracts.

AB Most models of economic organizations assume that agents are purely self-interested: they will be dishonest whenever monetary gains can be made. This paper assumes that agents will be honest when the monetary loss is sufficiently small, but their choices will vary depending on their personal disutility for dishonest actions (here, shirking). Organizations will exploit this trait to reduce their costs, by contracting for a particular quality standard with incomplete monitoring. A common equilibrium outcome (1) increases efficiency by using agents' disutility for dishonesty, and (2) allows dishonest actions by less-ethical agents to be rewarded. The latter result is contrary to the common principal-agent result that in equilibrium all agents display honest behavior. Two specific forms of monitoring as well as the distribution of ethical types among workers help determine the degree of monitoring.

Kollmann, Robert

PD September 1996. **TI** The Exchange Rate in a Dynamic-Optimizing Current Account Model with Nominal Rigidities: A Quantitative Investigation. **AA** Universite de Grenoble 2 and Universite de Montreal. **SR** University College London Discussion Paper: 96/27; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. **PG** 35. **PR** 4 pounds. **JE** C61, E32, E40, F31, F32. **KW** Exchange Rates. Nominal Rigidities. Business Cycles. Dynamic Optimization.

AB This paper studies a dynamic-optimizing model of a semi-small open economy with sticky nominal prices and wages. The model exhibits exchange rate overshooting in response to money supply shocks. The predicted variability of the nominal and real exchange rate is roughly consistent with that of G7 effective exchange rates during the post-Bretton Woods era. The model predicts that a positive domestic money supply shock lowers the domestic nominal interest rate, raises output and leads to a nominal and real depreciation of the country's currency. Increases in domestic labor productivity and in the world interest rate too are predicted to induce a nominal and real exchange rate depreciation.

PD January 1997. **TI** The Exchange Rate in a Dynamic-Optimizing Current Account Model with Nominal Rigidities: A Quantitative Investigation. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/07; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** E32, E43, E51, F32, F33. **KW** Nominal Rigidities. Current Account. Exchange Rates. Money Supply. Interest Rates.

AB See the abstract for Robert Kollmann, September 1996. "The Exchange Rate in a Dynamic-Optimizing Current Account Model with Nominal Rigidities: A Quantitative

Investigation." University College London Discussion Paper: 96/27; Department of Economics, University College London, Gower Street, London WC1E 6BT, England.

Kotlikoff, Laurence J.

TI The Effects of Income and Wealth on Time and Money Transfers Between Parents and Children. **AU** Altonji, Joseph G.; Hayashi, Fumio; Kotlikoff, Laurence J.

TI Understanding the Postwar Decline in U.S. Saving: A Cohort Analysis. **AU** Gokhale, Jagadeesh; Kotlikoff, Laurence J.; Sabelhaus, John.

Kramarz, Francis

TI Changes in the Relative Structure of Wages and Employment: A Comparison of the United States, Canada, and France. **AU** Card, David; Kramarz, Francis; Lemieux, Thomas.

TI The Entry and Exit of Workers and the Growth of Employment: An Analysis of French Establishments. **AU** Abowd, John M.; Corbel, Patrick; Kramarz, Francis.

Kreider, Brent

TI Applications to the US Disability Program: A Semiparametric Approach. **AU** Riphahn, Regina T.; Kreider, Brent.

Kremer, Michael

PD May 1996. **TI** How Much Does Sorting Increase Inequality? **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5566; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 16. **PR** \$5.00. **JE** D31, D63, I21, J12. **KW** Inequality. Sorting.

AB Social commentators from William Julius Wilson to Charles Murray have argued that increased sorting of people into internally homogenous neighborhoods, schools, and marriages is spurring long-run inequality. Calibration of a formal model suggests that these fears are misplaced. In order to increase the steady-state standard deviation of education by one percent, the correlation between neighbors' education would have to double, or the correlation between spouses' education would have to increase by one-third. In fact, both correlations have declined slightly over the past few decades. Sorting has somewhat more significant effects on intergenerational mobility than on inequality.

Krishna, Kala

PD March 1996. **TI** Transferable Licenses vs. Nontransferable Licenses: What is the Difference? **AU** Krishna, Kala; Tan, Ling Hui. **AA** Krishna: Pennsylvania State University and National Bureau of Economic Research. **Tan**: McGill University. **SR** National Bureau of Economic Research Working Paper: 5484; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 22. **PR** \$5.00. **JE** D45, F13. **KW** Licenses. Transferable Licenses. Quotas.

AB This paper questions the presumptions that transferable quota licenses are worth more and result in higher welfare. We show that the price of a transferable license will tend to be

higher than that of its nontransferable counterpart only if the underlying quota is quite restrictive. Despite this, if consumer surplus and license revenue have equal weight in the welfare function, transferability is preferable to nontransferability. If their weights are unequal, then the comparison could go either way. We also show that increased uncertainty, in the form of a mean preserving spread, does not affect the license price under nontransferability and could raise or lower the level of the license price with transferability depending on the restrictiveness of the quota.

PD May 1996. **TI** Implementing Market Access. **AU** Krishna, Kala; Roy, Suddhasatwa; Thursby, Marie. **AA** Krishna: Pennsylvania State University and National Bureau of Economic Research. Roy: Purdue University. Thursby: Purdue University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5593; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** F13, H87. **KW** International Trade. Trade Policy. Market Share.

AB The outcome of trade policies to increase access for foreign firms to the home country's market is shown to be sensitive to the implementation procedure used. The importance of the timing of moves between government and firms is highlighted by focusing on taxes and subsidies to implement minimum market share requirements. Both taxes and subsidies chosen by the home government after firms have picked prices create powerful incentives for firms to raise prices -- effects that are similar in nature to those found with quotas/VER's. We show that some degree of imprecision in implementing the target engenders less anti-competitive outcomes relative to perfect enforcement.

Kroszner, Randall S.

TI Log-Rolling and Economic Interests in the Passage of the Smoot-Hawley Tariff. **AU** Irwin, Douglas A.; Kroszner, Randall S.

Krueger, Alan B.

PD March 1996. **TI** A Statistical Analysis of Crime Against Foreigners in Unified Germany. **AU** Krueger, Alan B.; Pischke, Jorn-Steffen. **AA** Krueger: Princeton University and National Bureau of Economic Research. Pischke: Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 5485; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** D78, K42. **KW** Anti-foreigner Crime. Unified Germany. Violence. Illegal Behavior.

AB Germany has experienced a high and rising rate of anti-foreigner violence during the early 1990's. To analyze the determinants of crime against foreigners we assembled a new data set on the number and nature of such crimes at the county levels based on newspaper reports. We find significant differences in the patterns of violence in the eastern and western parts of the country. The incidence of anti-foreigner crime is higher in the east and rises with distance from the former west German border. Economic variables like unemployment and wages matter little for the level of crime once location in the east is taken into account. The relative number of foreigners in a country has no relationship with the incidence of ethnic crimes in the west, whereas in the east it has a positive association with the number of crimes per resident

and a negative association with the number of crimes per foreign resident.

Kunzel, Peter

TI Intra-Industry Trade of Arab Countries: An Indicator of Potential Competitiveness. AU Havrylyshyn, Oleh; Kunzel, Peter.

Kwon, Gooheon

PD May 1997. TI Experiences with Monetary Integration and Lessons for Korean Unification. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/65; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 27. PR not available. JE E42, E61, E63, F36, P20. KW Monetary Integration. Korean Unification. Korea. Monetary Policy.

AB This paper discusses the timing of monetary integration and supporting economic policies during a rapid and largely uncontrolled process of Korean unification. The paper concludes that the transitory use of a separate currency in each region and supporting economic policies would help limit the initial costs of unification although the extent of the eventual cost reduction would depend critically on the success of ensuing economic reforms in the North during the transition. Maintaining the competitiveness of the northern economy would need to be a primary policy objective in the case of an early introduction of a common currency.

Lafontaine, Francine

PD May 1996. TI The Dynamics of Franchise Contracting: Evidence from Panel Data. AU Lafontaine, Francine; Shaw, Kathryn. AA Lafontaine: University of Michigan and National Bureau of Economic Research. Shaw: Carnegie Mellon University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5585; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 34. PR \$5.00. JE D21, D82, L14. KW Franchise Contracting. Panel Data. Asymmetric Information. Moral Hazard.

AB In this paper, we model the determinants of franchise contract terms, namely royalty rates and franchise fees, using a unique panel data set of about 1000 franchisers for the period 1980-1992. We focus on the extent to which firms adjust the terms of their contracts as they become better established, and find that adjustments are relatively infrequent and that firms do not systematically raise or lower their royalty rates or franchise fees when they do adjust them. These results tend to refute a number of existing theories of franchising that are based on risk-sharing, asymmetric information, and certain incentive structures, but support those based on franchiser opportunism and to some extent double-sided moral hazard. Our results also suggest that when industrial organization economists do not have access to panel data, their work may well suffer the omitted variable bias caused by unobserved firm effects.

Lago, Ricardo

TI Enterprises in Transition: Macroeconomic Influences on Enterprise Decision-making and Performance. AU Buitter, Willem H.; Lago, Ricardo; Rey, Helene.

Laixuthai, Adit

TI U.S. Trade Policy and Cigarette Smoking in Asia.

AU Chaloupka, Frank J.; Laixuthai, Adit.

Lajeri, Fatma

PD May 1997. TI Parametric Characterizations of Risk Aversion and Prudence. AU Lajeri, Fatma; Nielsen, Lars Tyge. AA Lajeri: Koc University. Nielsen: INSEAD. SR Centre for Economic Policy Research Discussion Paper: 1650; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 22. PR 4 pounds or \$8.00. JE D81. KW Risk Aversion. Prudence.

AB We show that in order to determine whether one decision-maker is more risk averse than another, it is sufficient to consider their attitudes towards a given two-parameter family of risks. When all risks belong to this family, useful comparisons of risk aversion can be made even in situations of "background risk". Since expected utility becomes a function of mean and standard deviation, risk aversion can be measured by the marginal rate of substitution between mean and standard deviation. A utility function exhibits decreasing risk aversion if, and only if, this slope is a decreasing function of the mean. Second, we use the concept of prudence to solve a long-standing problem in mean-variance analysis: what is the economic interpretation of the concavity of a utility function which is a function of mean and variance? We show that in the case of normal distributions, utility is concave as a function of variance and mean if, and only if, it exhibits decreasing prudence.

Lamont, Owen

PD March 1996. TI Cash Flow and Investment: Evidence from Internal Capital Markets. AA University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5499; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 23. PR \$5.00. JE G31, L71. KW Cash Flow. Oil Prices. Oil Companies. Investment.

AB Using data from the 1986 oil price decrease, I examine the capital expenditures of non-oil subsidiaries of oil companies. I test the joint hypothesis that 1) a decrease in cash/collateral decreases investment, holding fixed the profitability of investment, and 2) the finance costs of different parts of the same corporation are interdependent. The results support this joint hypothesis: oil companies significantly reduced their non-oil investment compared to the median industry investment. The 1986 decline in investment was concentrated in non-oil units that were subsidized by the rest of the company in 1985.

TI Investor Reaction to Salient News in Closed-End Country Funds. AU Klibanoff, Peter; Lamont, Owen; Wizman, Thierry.

Lane, Timothy

PD May 1997. TI Does Public Disagreement on Monetary Policy Unsettle the Markets? AU Lane, Timothy; Samiei, Hossein. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/63; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 10. PR not available. JE E31, E52, E58. KW Inflation Targeting. Transparency. Monetary Policy. United Kingdom.

AB Publication of minutes of monthly monetary policy

meetings between the Chancellor of the Exchequer and the Governor of the Bank of England was a conspicuous feature of the United Kingdom's inflation targeting framework from 1994 through April 1997. It was intended to reinforce credibility by publicizing the criteria on which policy was decided. On some occasions, however, these minutes revealed disagreement between the participants. This paper examines whether such disagreement unsettled the markets and detracted from credibility.

Laruelle, Annick

PD March 1997. **TI** The Development of the Division of Power among the European Commission, the Council and the European Parliament. **AU** Laruelle, Annick; Widgren, Mika. **AA** Laruelle: Catholic University of Louvain. Widgren: Yrjo Jahnsson Foundation. **SR** Centre for Economic Policy Research Discussion Paper: 1600; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 20. **PR** 4 pounds or \$8.00. **JE** C71, D71. **KW** European Union. Game Theory. Inter-Governmental Conference. Voting Power.

AB Probabilistic measures of a priori voting power are useful tools to assess actors' influence on collective decision-making either for the purpose of designing a voting organ or to model particular policy cases. This paper makes an attempt to reduce a dynamic voting process into a cooperative voting game and uses the EU as an example. We propose a probabilistic reduced extensive form voting game. By subsequent specialization of power indices we are able to quantify, for example, to what extent the development of the decision-making procedures on the EU has changed the division of power among its main organs.

Lau, Lawrence J.

TI Pareto-Improving Economic Reforms through Dual-Track Liberalization. **AU** Qian, Yingyi; Roland, Gerard; Lau, Lawrence J.

Lawson, Clive

TI Internationalization Processes, Networking and Local Embeddedness in Technology-Intensive Small Firms. **AU** Keeble, David; Lawson, Clive; Lawton Smith, Helen; Moore, Barry; Wilkinson, Frank.

PD March 1997. **TI** Territorial Clustering and High-Technology Innovation: From Industrial Districts to Innovative Milieux. **AA** University of Cambridge. **SR** University of Cambridge, ESRC Centre for Business Research Working Papers: WP54; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, England. Website: www.econ.cam.ac.uk/dae. **PG** 25. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** L11, O18, O31, O32, R32. **KW** Industrial Districts. Innovative Milieu. Innovation. Technological Firms.

AB This paper reviews recent attempts to conceptualize and investigate the relationship between geographical proximity and innovative firm behavior. Special attention is given to concepts of "industrial district" and "innovative milieu" and to the literatures in which they appear. This focus serves to identify important areas of consensus, underlying trends in thought and the main issues which stand in need of further investigation. User-producer and incubator-type innovation are distinguished and it is argued that the main advantage of the milieu literature is that it incorporates both types of innovation

and, in so doing, provides a richer account of innovation, learning and the means by which these are encouraged by geographical proximity.

Lawton Smith, Helen

TI Internationalization Processes, Networking and Local Embeddedness in Technology-Intensive Small Firms. **AU** Keeble, David; Lawson, Clive; Lawton Smith, Helen; Moore, Barry; Wilkinson, Frank.

Laxton, Douglas

TI Phillips Curves, Phillips Lines and the Unemployment Costs of Overheating. **AU** Clark, Peter B.; Laxton, Douglas.

PD March 1997. **TI** Possible Effects of European Monetary Union on Switzerland: A Case Study of Policy Dilemmas Caused by Low Inflation and the Nominal Interest Rate Floor. **AU** Laxton, Douglas; Prasad, Eswar S. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/23; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 18. **PR** not available. **JE** C68, E31, E52, F30, F41. **KW** European Monetary Union. Monetary Policy. Nonlinearities. Policy Simulations. Switzerland.

AB This paper examines the possible effects on Switzerland of asset preference shifts in favor of Swiss-franc-denominated assets that could result from EMU. Alternative policy responses to temporary and persistent asset preference shifts and the consequent pressures for exchange rate appreciation are examined. Simulations of a stylized macroeconomic model of the Swiss economy indicate that monetary policy is likely to be the most effective tool for stabilizing output in the short run, but at the cost of a temporary increase in inflationary pressures. The simulations highlight the dilemmas faced by policymakers in an environment with low inflation and nominal interest rates.

Leahy, John V.

TI Fixed Costs: The Demise of Marginal q . **AU** Caballero, Ricardo J.; Leahy, John V.

LeBaron, Blake

PD March 1996. **TI** Technical Trading Rule Profitability and Foreign Exchange Intervention. **AA** University of Wisconsin-Madison and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5505; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 14. **PR** \$5.00. **JE** F31, G12. **KW** Trading Rules. Foreign Exchange. Exchange Rates. Predictability.

AB There is reliable evidence that simple rules used by traders have some predictive value over the future movement of foreign exchange prices. This paper will review some of this evidence and discuss the economic magnitude of this predictability. The profitability of these trading rules will then be analyzed in connection with central bank activity using intervention data from the Federal Reserve. The objective is to find out to what extent foreign exchange predictability can be confined to periods of central bank activity in the foreign exchange market. The results indicate that after removing periods in which the Federal Reserve is active, exchange rate predictability is dramatically reduced.

Lee, K.

TI Employment Determination in the UK Manufacturing Sector in the Presence of Variable Adjustment Costs: A Disaggregated Analysis. **AU** Greenslade, J.; Henry, B.; Lee, K.

Lehr, William

PD June 1996. **TI** Computer Use and Productivity Growth in Federal Government Agencies, 1987 to 1992. **AU** Lehr, William; Lichtenberg, Frank. **AA** Lehr: Columbia University. Lichtenberg: Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5616; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** J24, J45, O33. **KW** Technology. Productivity Growth. Computer Usage. Federal Agencies.

AB This paper examines trends in computer usage and the effect on productivity growth for a sample of federal government agencies over the period from 1987 to 1992. The data show that computer usage increased dramatically and that there was a shift towards more powerful, lower-cost, distributed systems and that usage diffused more extensively throughout the sampled agencies. These trends mirror, while perhaps lagging, those experienced by large private firms over the same period. From estimates of a Cobb-Douglas production function for government services, the authors derive an estimated output elasticity for computers of 0.06 which suggests, although inconclusively, that computers did contribute significantly to output growth, thereby refuting the Computer Productivity Paradox as it applies to the public sector. They also observe a positive correlation between increased computer usage and compensation growth.

Leigh, Lamin

PD January 1997. **TI** Stock Market Equilibrium and Macroeconomic Fundamentals. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/15; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 32. **PR** not available. **JE** C52, G12, G14, G18. **KW** Singapore. Financial Markets. Asset Pricing. Market Efficiency. Granger Causality.

AB This paper examines the efficiency of the Stock Exchange of Singapore and the relationship between the stock market and the overall economy. Using a wide range of methods for testing market efficiency, the paper establishes that the Singapore stock market is both "weakly" and "semi-strongly" efficient in asset-pricing terms but not "strongly" efficient. Granger causality tests based on the efficiency test results indicate that developments in the stock market appear to be systematically related to the overall economy in Singapore and can thus serve as a leading indicator of its intertemporal behavior.

Lemieux, Thomas

TI Changes in the Relative Structure of Wages and Employment: A Comparison of the United States, Canada, and France. **AU** Card, David; Kramarz, Francis; Lemieux, Thomas.

Leruth, Luc

TI Cyclical Effects of the Composition of Government Purchases. **AU** Aziz, Jahangir; Leruth, Luc.

Levine, Phillip

PD June 1996. **TI** Roe V. Wade and American Fertility. **AU** Levine, Phillip; Kane, Thomas; Staiger, Douglas; Zimmerman, David. **AA** Levine: Wellesley College and National Bureau of Economic Research. Kane and Staiger: Harvard University and National Bureau of Economic Research. Zimmerman: Williams College. **SR** National Bureau of Economic Research Working Paper: 5615; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** \$5.00. **JE** I18, J13. **KW** Abortion. Birth Rates. Fertility.

AB This paper considers the effect of abortion legalization on births in the United States. A simple theoretical model demonstrates that the impact of abortion legalization on the birth rate is ambiguous because both pregnancy and abortion decisions could be affected. Variation in the timing of legalization across states in the early 1970's is used to estimate the effect of abortion on birth rates. The paper's findings indicate that states legalizing abortion experienced a 5 percent decline in births relative to other states. Out-of-wedlock births declined by twice as much as births in wedlock. If legalization in some states affected birth rates in neighboring states, comparing births between states will underestimate the actual reduction. Using more distant comparison states increases the estimated impact of abortion legalization on birth rates to about 8 percent.

Levy, Joaquim

PD April 1997. **TI** Aspects of the Monetary Transmission Mechanism under Exchange Rate Targeting: The Case of France. **AU** Levy, Joaquim; Halikias, Ioannis. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/44; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 26. **PR** not available. **JE** E43, E51, E52, F33. **KW** Monetary Transmission. Exchange Rates. Interest Rates. France. Vector Autoregression.

AB This paper examines monetary transmission in France using the vector autoregression methodology. Interest rates are decomposed into external and domestic components, and a non-recursive contemporaneous structure is used to identify the system. Innovations in the external component are found to have a significant impact on economic activity, while innovations in the domestic premium have a statistically negligible effect, suggesting that interest rate hikes in defense of the franc may have had a smaller impact on the economy than usually thought. The paper also discusses some implications of Economic and Monetary Union and provides evidence concerning the importance of the credit channel in France.

Libecap, Gary D.

TI The Determinants and Impact of Property Rights: Land Titles on the Brazilian Frontier. **AU** Alston, Lee J.; Libecap, Gary D.; Schneider, Robert.

Lichtenberg, Frank

PD June 1996. **TI** The Effect of New Political Administration on Federal Government Productivity and Employment. **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5601; National Bureau of Economic

Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 9. PR \$5.00. JE E24, J24, J45. KW Public Employment. Productivity. Employment. Turnover.

AB This paper examines the impact of changes in political administration on the productivity and employment of the entire executive branch of the U.S. government using data compiled under the Bureau of Labor Statistics' Federal Productivity Measurement Program. The estimates indicate that the mean rate of productivity growth in the first year of administration is 2.6 times as high as the mean growth in subsequent years. Also, employment growth is strictly increasing with respect to the administration's tenure. These findings are broadly consistent with evidence about the private sector. They suggest that the inauguration of a new administration initially purges the executive branch, but as an administration's tenure increases, fat and inefficiency tend to accumulate.

TI Computer Use and Productivity Growth in Federal Government Agencies, 1987 to 1992. AU Lehr, William; Lichtenberg, Frank.

Lindbeck, Assar

PD January 1997. **TI** Centralized Bargaining, Multi-Tasking, and Work Incentives. AU Lindbeck, Assar; Snower, Dennis J. AA Lindbeck: Institute for International Economic Studies. Snower: Birkbeck College. **SR** Centre for Economic Policy Research Discussion Paper: 1563; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 52. **PR** 4 pounds or \$8.00. **JE** D23, J24, J31, J51. **KW** Wage Bargaining. Restructuring. Centralized Bargaining. Firm Organization. Technological Change. Information Flows.

AB The paper examines the implications of an important aspect of the ongoing reorganization of work -- the move from occupational specialization towards multi-tasking -- for centralized wage bargaining. The analysis shows how, on account of this reorganization, centralized bargaining becomes increasingly inefficient and detrimental to firms' profit opportunities, since it prevents firms from offering their employees adequate incentives to perform the appropriate mix of tasks. The paper also shows how centralized bargaining inhibits firms from using wages to induce workers to learn how to use their experience from one set of tasks to enhance their performance at other tasks. In this way, the paper helps explain the increasing resistance to centralized bargaining in various advanced market economies.

Liu, Zheng

PD November 1996. **TI** Seasonal Cycles, Business Cycles, and Monetary Policy. AA University of Minnesota. **SR** University of Minnesota Center for Economic Research Discussion Paper: 292; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 39. **PR** no charge. **JE** E32, E41, E43, E52. **KW** Seasonal Cycles. Business Cycles. Monetary Policy. Money Demand. Federal Reserve.

AB Empirical studies show the Federal Reserve System (Fed) has been smoothing short-term nominal interest rates across seasonal cycles, but has allowed interest rates to co-move with output over business cycles, despite striking similarities between the two cycles in terms of output co-movements and

relative volatilities. This paper tries to explain why the Fed has been treating the two cycles so differently. The author constructs a monetary growth model which replicates the seasonal and cyclical patterns of aggregate U.S. data. Then the author uses the model to compare the historical U.S. monetary policy with two alternative policy rules. Numerical simulations show that (1) the model captures both the real and nominal features of U.S. data quite well and it outperforms traditional cash-in-advance models in replicating the nominal variables; and (2) the historical monetary policy attains higher welfare than both alternatives.

Lizal, L.

PD April 1997. **TI** Enterprise Breakups and Performance During the Transition. AU Lizal, L.; Singer, M.; Svejnar, J. AA Lizal and Svejnar: CERGE-EI, Prague and University of Michigan. Singer: CERGE-EI, Prague. **SR** Centre for Economic Policy Research Discussion Paper: 1631; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** not available. **PR** 4 pounds or \$8.00. **JE** D21, D24, L11, P11. **KW** Transition. Czechoslovakia. Spin-Off Firm. Break-Up. State-Owned Enterprise.

AB This paper estimates the effects of the 1991 break-ups of Czechoslovak state-owned enterprises (SOE's) on subsequent performance of the master enterprises and the spin-off units. The analysis is based on quarterly and annual data of Czechoslovak industrial enterprises. We estimate the performance effect of a spin-off by comparing the performance of enterprises that were present throughout the 1990-2 period but did not experience any spin-offs to that of: (a) master enterprises that experienced spin-offs; and (b) the new spin-off subsidiaries. The estimates suggest that the break-ups had a significant immediate (1991) effect on productive efficiency and profitability of industrial firms. The effect was positive for small to slightly above-average size spin-offs and negative for large ones. The hypothesis that the estimated effect of spin-offs on performance was identical for the spin-off subsidiaries and the master enterprises that experienced the spin-offs cannot be rejected. The 1991 estimates thus strongly suggest that the large firms created under the centrally-planned system suffered from inefficiencies that were alleviated by the break ups of these firms into smaller units.

Lizondo, Saul

TI Leading Indicators of Currency Crises. AU Kaminsky, Graciela; Lizondo, Saul; Reinhart, Carmen.

Loehman, Edna Tusak

PD December 1995. **TI** Design of a Coordination Process for Cost Sharing. AU Loehman, Edna Tusak; Rassenti, Steve. AA Loehman: Purdue University and University of Arizona. Rassenti: University of Arizona. **SR** University of Arizona Economics Working Paper: 95/1; Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, University of Arizona, Tucson, AZ 85721-0108. **PG** 47. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** D70, H40. **KW** Collective Decisions. Shared Good. Cooperation.

AB This paper addresses the situation of a group that is trying to determine provision of a shared good (or ameliorate a common bad). A cooperative agreement is sought simultaneously for shared good quantity and its finance by group members. The subject is related to public goods, but here

the shared good may also be a club good or a good shared within a firm. Although the number of participants for a shared good may be small or large, the type of process described here may be more successful with a relatively small group.

PD December 1995. **TI** Design of New Institutions for Environmental and Resource Management, With Application to Pollution Control. **AA** Purdue University and University of Arizona. **SR** University of Arizona Economics Working Paper: 95/2; Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, University of Arizona, Tucson, AZ 85721-0108. **PG** 18. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** D62, H23, Q25, Q30. **KW** Pollution. Environmental Problems. Common Ground. Incentives.

AB Considering the nature of conflicts over resource and environmental problems, a new approach is needed. Common ground decision-making as a paradigm holds promise in such situations. Economists can help develop designs of institutions which would foster such a paradigm. For pollution control, the common paradigm suggests that polluters and sufferers can together determine pollution emission, pollution reduction, and finance of pollution reduction. This paper proposes a new policy instrument for this purpose involving taxes and subsidies and cost sharing and a process through which polluters and sufferers would jointly determine emissions and pollution reduction. Incentives for cooperation are provided by a noncooperative threat point.

Lopez, Humberto

PD June 1997. **TI** How Long is the Long Run? A Dynamic Analysis of the Spanish Business Cycle. **AU** Lopez, Humberto; Fabrizio, Stefania; Ubide, Angel. **AA** Lopez: World Bank and University Jaume I, Castellon, Spain. Ubide: European University Institute and International Monetary Fund. Fabrizio: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/74; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 15. **PR** not available. **JE** C32, E12, E13, E24, E32. **KW** Shocks. Business Cycles. Sacrifice Ratio. Spain.

AB This paper studies the sources of Spanish business cycles. It assumes that Spanish output is affected by two types of shocks. The first one has permanent long-run effects on output and it is identified as a supply shock. Spain seems to have long business cycles, of about 15 years. As restrictive demand policies to control the inflation rate could prove painful and disappointing, supply side policies aimed at reducing rigidities in the product and labor market would be a better way to achieve the same objective.

Lopez-de-Silanes, Florencio

PD March 1996. **TI** Determinants of Privatization Prices. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5494; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** D44, L33. **KW** Privatization. Privatization Prices. Premia. Auctions.

AB Generating government revenue is a common objective in privatization. This paper asks: what determines privatization prices? Pursuing this query helps resolve the current controversies about the bearing of speed and the role for government actions prior to privatization. The data, gathered

from primary sources, encompass 361 privatized Mexican companies in 49 four-digit industry codes. The determinants of auction privatization prices are divided into three groups: (1) company performance and industry parameters; (2) the auction process and its requirements; and (3) the prior restructuring actions taken by the government. Controlling for company and industry effects reveals the significant impact of the costs and characteristics of the labor force. Minority control packages carry large discounts. Auction requirements that allow foreign investors result in higher sale premia, while restrictions constraining participation or payment forms reduce net prices. The speed of privatization substantially influences net prices: the longer it takes to put the company on the block, the more severe the deterioration in performance, and the lower the premium obtained. Pre-sale reductions in labor force, and particularly the firing of CEO's, lead to significantly higher premiums. Overall, the results show increased premia for government actions that stimulate bidder participation and expedite the privatization process.

Loungani, Prakash

TI Capital Mobility and the Output-Inflation Tradeoff. **AU** Razin, Assaf; Yuen, Chi-Wa; Loungani, Prakash.

Lutz, Stefan

PD March 1997. **TI** International Leapfrogging and Subsidies. **AU** Lutz, Stefan; Herguera, Inigo. **AA** Lutz: London School of Economics. Herguera: Universidad Carlos III de Madrid. **SR** Centre for Economic Policy Research Discussion Paper: 1606; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 32. **PR** 4 pounds or \$8.00. **JE** F12, F13, L13. **KW** Product Differentiation. Oligopoly. Trade. Quality. Leapfrogging. Country Asymmetries.

AB The recent extensive study of vertical product differentiation models has allowed for the analysis of international trade issues in the presence of country asymmetries in terms of product qualities, technology, costs, market size and income. In the presence of such asymmetries, national industries will either be market leaders or be lagging behind in the international marketplace in terms of their product qualities. The resulting asymmetry in profits creates powerful incentives for lagging industries as well as their national governments to reverse this situation to their advantage, i.e. to induce "leapfrogging" in terms of product qualities. This paper presents an analysis of subsidies as a facilitating device for leapfrogging.

MacDonald, Ronald

PD January 1997. **TI** What Determines Real Exchange Rates? The Long and Short of It. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/21; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** C32, F31, F32. **KW** Exchange Rates. Cointegration. Foreign Exchange. Current Account.

AB This paper presents a reduced-form model of the real exchange rate. Using multilateral cointegration methods, the model is implemented for the real effective exchange rates of the dollar, the mark, and the yen, over the period 1974-1993. In contrast to much other research using real exchange rates, there is evidence of significant and sensible long-run relationships for a simplified version as well as for the full version of the

model. The estimated long-run relationships are used to produce dynamic equations, which outperform a random walk and produce sensible dynamic patterns in the context of an impulse response analysis.

PD April 1997. **TI** On the Japanese Yen-US Dollar Exchange Rate: A Structural Econometric Model Based on Real Interest Differentials. **AU** MacDonald, Ronald; Nagayasu, Jun. **AA** University of Strathclyde. **SR** Centre for Economic Policy Research Discussion Paper: 1639; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 25. **PR** 4 pounds or \$8.00. **JE** F31. **KW** Co-Integration. Exchange Rates. Econometric Modeling.

AB In this paper the short- and long-run movements of the Japanese yen- U.S. dollar exchange rate are modeled for the recent floating period. The modern general-to-specific approach is used as our econometric framework. In contrast to some other exchange rate studies, we interpret multiple cointegrating vectors using economic theory. Among the findings are sensible and significant long-run relationships, and dynamic equations which describe the movements of the exchange rate and satisfy a battery of diagnostic tests. The models are shown to produce good in- sample forecasting performance and also out-of-sample forecasting performance which dominates a random walk.

MacKinnon, James G.

TI The Size and Power of Bootstrap Tests. **AU** Davidson, Russell; MacKinnon, James G.

TI The Size Distortion of Bootstrap Tests. **AU** Davidson, Russell; MacKinnon, James G.

TI The Power of Bootstrap Tests. **AU** Davidson, Russell; MacKinnon, James G.

TI Bootstrap Testing in Nonlinear Models. **AU** Davidson, Russell; MacKinnon, James G.

Madrian, Brigitte C.

TI Labor Market Responses to Rising Health Insurance Costs: Evidence on Hours Worked. **AU** Cutler, David M.; Madrian, Brigitte C.

Mairesse, Jacques

PD March 1996. **TI** Estimating the Productivity of Research and Development: An Exploration of GMM Methods Using Data on French and United States Manufacturing Firms. **AU** Mairesse, Jacques; Hall, Bronwyn H. **AA** Mairesse: INSEE and National Bureau of Economic Research. Hall: University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5501; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** D24, L60, O32. **KW** Research and Development. Manufacturing Productivity. GMM Methods.

AB A comparative study of the contribution of R&D to firm-level productivity in French and United States manufacturing firms in the 1980's is presented. The study uses two large panels of approximately 1000 manufacturing firms covering over half of all R&D spending in each country and focuses on the estimation and interpretation of the relationship between output growth and the growth of R&D investment in the

presence of simultaneity and firm heterogeneity. We use GMM methods to control for both sources of estimation bias, and we find 1) overall, the contribution of R&D to sales productivity growth appears to have declined during the 1980's, and 2) the role of simultaneity bias is higher in the U.S. than in France, possibility reflecting the greater importance of liquidity constraints for R&D investment in that country.

Mankiw, N. Gregory

PD June 1996. **TI** Stock Market Yields and the Pricing of Municipal Bonds. **AU** Mankiw, N. Gregory; Poterba, James M. **AA** Mankiw: Harvard University and National Bureau of Economic Research. Poterba: Massachusetts Institute of Technology. **SR** National Bureau of Economic Research Working Paper: 5607; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 15. **PR** \$5.00. **JE** G11, G12. **KW** Municipal Bonds. Clientele Model. Yield Spread.

AB This paper proposes an alternative to the traditional model for explaining the spread between taxable and tax-exempt bond yields. This alternative model is a special case of a clientele model of portfolio choice and asset market equilibrium. In particular, the paper considers a setting with two types of investors, a taxable investor and a tax-exempt investor. The tax-exempt investor holds only taxable bonds, and the taxable investor holds only tax-exempt bonds. Both investors hold equity, and the taxable and tax-exempt bond markets are linked through the equilibrium conditions governing equity holding and bond holding for each type of investor. This alternative model can potentially explain the small observed spread between taxable and tax-exempt yields. In addition, this model predicts that the yield spread between taxable and tax-exempt bonds should be an increasing function of the dividend yield on corporate stocks.

Marceau, Nicolas

TI An Agency Model of Welfare and Disability Assistance. **AU** Boadway, Robin; Marceau, Nicolas; Sato, Motohiro.

Marchand, Maurice

TI Subsidies Versus Public Provision of Private Goods as Instruments for Redistribution. **AU** Boadway, Robin; Marchand, Maurice; Sato, Motohiro.

Marion, Nancy P.

TI Policy Implications of "Second-Generation" Crisis Models. **AU** Flood, Robert P.; Marion, Nancy P.

Markusen, James R.

PD March 1996. **TI** Multinational Production, Skilled Labor, and Real Wages. **AU** Markusen, James R.; Venables, Anthony J. **AA** Markusen: University of Colorado and National Bureau of Economic Research. Venables: London School of Economics. **SR** National Bureau of Economic Research Working Paper: 5483; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** E24, F16, F23. **KW** Multinational Production. Wage Gap. Skilled Labor. Trade Barriers.

AB Adapting our earlier model of multinationals, we address policy issues involving wages and labor skills. Multinational firms may arise endogenously, exporting their firm-specific knowledge capital to foreign production facilities, and

geographically fragmenting production into skilled and unskilled-labor-intensive activities. Multinationals thus alter the nature of trade, from trade in goods (produced with both skilled and unskilled labor) to trade in skilled-labor-intensive producer services. Results shed light on several policy questions. First, multinationals increase the skilled/unskilled wage gap in the high income country and, under some circumstances, in the low income country as well. Second, there is a sense in which multinationals export low skilled jobs to the lower income country. Third, trade barriers do not protect unskilled labor in the high income countries. By inducing a regime shift to multinationals, trade barriers protect the abundant factor, at least in the high income country and possibly in both countries. Fourth, a convergence in country characteristics induces the entry of multinationals and raises the skilled-unskilled wage gap in the initially large and skilled-labor-abundant country, and possibly in the small skilled-labor-scarce country as well.

PD March 1996. **TI** Costly Pollution Abatement, Competitiveness, and Plant Location Decisions. **AA** University of Colorado and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5490; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** F02, F23, Q25. **KW** Trade Liberalization. Plant Location. Environmental Restrictions.

AB The U.S.-Mexico free-trade debate included some theoretical assertions that were then used as arguments against trade and investment liberalization. (1) Trade liberalization increases the degree to which production is internationally relocated in response to environmental restrictions ("environmental dumping"?). (2) Investment liberalization, leading to multinational firms, similarly increases the production and welfare response to costly environmental restrictions. This paper adapts an oligopoly model, in which multinationals can arise endogenously, to examine these arguments. The findings are: (1) Trade liberalization increases production sensitivity to costly environmental restrictions, but arguments against liberal trade on welfare grounds do not follow. (2) Multinationals do not increase the production-reallocation effect caused by environmental restrictions or regulations. The inter-firm reallocation of production by competitive market forces in the absence of multinationals is slightly larger than the intra-firm reallocation when multinationals are present. In addition, the paper finds that the firm taken by cost increases in crucial: restrictions that fall on fixed costs (e.g., more efficient burners and motors) have much smaller effects on production and welfare than restrictions that fall on marginal costs (e.g., cleaner fuels).

PD April 1996. **TI** The Theory of Endowment, Intra-Industry, and Multinational Trade. **AU** Markusen, James R.; Venables, Anthony J. **AA** Markusen: University of Colorado and National Bureau of Economic Research. Venables: London School of Economics. **SR** National Bureau of Economic Research Working Paper: 5529; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** F01, F02, F12, F23. **KW** Trade Model. Multinational Corporations. **AB** We consider a trade model combining a 2x2x2 Heckscher-Ohlin structure, monopolistic competition, transport costs, and multinational corporations. We demonstrate how the mix of national and multinational firms that operate in

equilibrium depends on technology and on the division of the world endowment between countries. Multinationals are more likely to exist the more similar are countries in both relative and absolute endowments. Where multinationals exist they reduce the volume of trade and raise world welfare (although not necessarily that of both countries). They also reduce the agglomeration forces that arise when international factor mobility is allowed.

Marshall, Robert C.

PD November 1996. **TI** Pattern Bargaining. **AU** Marshall, Robert C.; Merlo, Antonio. **AA** Marshall: Penn State University. Merlo: University of Minnesota. **SR** University of Minnesota Center for Economic Research Discussion Paper: 290; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 45. **PR** no charge. **JE** C78, J51, L13. **KW** Pattern Bargaining. Union Bargaining. Sequential Bargaining. **AB** Many unions in the United States have for several years engaged in what is known as pattern bargaining -- a union determines a sequence for negotiations with firms within an industry where the agreement with the first firm becomes the take-it-or-leave-it offer by the union for all subsequent negotiations. In this paper, the authors show that pattern bargaining is preferred by a union to both simultaneous industry-wide negotiations and sequential negotiations without a pattern. Allowing for inter-firm productivity differentials within an industry, it is also shown that pattern bargaining, whether it involves commitment to a pattern in wages or to a pattern in labor costs, achieves the highest possible payoff for the union from among a large group of alternatives. The authors show that for small inter-firm productivity differentials, the union most prefers a pattern in wages, but for a sufficiently wide differential, the union prefers a pattern in labor costs.

Marston, Richard C.

PD March 1996. **TI** The Effects of Industry Structure on Economic Exposure. **AA** University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5518; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** F21, F23, F31, G13. **KW** Economic Exposure. Exchange Rates. Exporting Firm. Market Structure. **AB** A firm is subject to "economic exposure" if changes in exchange rates affect the firm's value, as measured by the present value of its future cash flows. This paper shows that in many forms of competition, including the most commonly studied case of monopoly, the economic exposure of an exporting firm is simply proportional to the firm's net revenues based in foreign currency. So the firm's hedging strategy is simple: sell foreign currency futures equal to the value of its net revenues in foreign currency. This simple result breaks down under some, but not all, forms of competition between the exporting firm and local firms. In that case, the exporting firm needs to know about the price elasticity of its product demand and its marginal cost in order to assess its exposure to exchange rates. So is hedging strategy also requires detailed knowledge of demand and cost conditions. The key determinant of economic exposure, therefore, is the competitive structure of the industry in which a firm operates.

Martin, Carmela

PD June 1997. **TI** The Determining Factors of Foreign Direct Investment in Spain and the Rest of the OECD: Lessons for CEECs. **AU** Martin, Carmela; Velazquez, Francisco J. **AA** Universidad Complutense de Madrid. **SR** Centre for Economic Policy Research Discussion Paper: 1637; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 22. **PR** 4 pounds or \$8.00. **JE** F15, F21. **KW** Foreign Direct Investment. Panel-Data Models. Central Europe. Eastern Europe.

AB This paper -- using an estimation of an econometric model with panel data -- investigates the determining factors in bilateral direct investment flows between OECD countries (except for the more recently- incorporated former communist countries of Central and Eastern Europe, or CEEC's) over the past decade. Although the research seeks to explore the general patterns in OECD countries, it also attempts to detect the possible patterns specific to the Spanish case, which could prove particularly useful in drawing inferences for the CEEC's. The findings suggest that international flows of direct investment between developed countries are explained not so much by factor endowment differences as by other variables suggested in Dunning's "ownership-location- internalization" (OLI) model.

Martin, Matthew A.

PD November 1996. **TI** Evidence on the Aggregate Price Effects of Drought and Production Control During the Recovery From the Great Depression. **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 96/11; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 18. **PR** not available. **JE** E31, E65, N52, Q10. **KW** Great Depression. Reflation. Simulated Prices. Production Control. Agriculture.

AB The recovery from the Great Depression was marked by substantial reflation in the presence of low or moderate economic growth and high unemployment. In this study, the author examines the effects of drought and agricultural production control as an alternate explanation for the price increases in the 1930's to current explanations of the unusual relationship among macroeconomic variables. This is accomplished by first estimating reduced form price equations for three crops and four commodities dependent upon those crops. These equations are used to simulate prices under normal crop yield and an absence of government production control. The simulated prices are multiplied by the respective weight for each commodity to arrive at a simulated aggregated wholesale price series. It is estimated that the combined effect of production control and severe droughts raised the price index by almost 14 percent by 1936.

Martin, Philippe

PD May 1997. **TI** The Exchange Rate Policy of the Euro: A Matter of Size? **AA** Graduate Institute of International Studies. **SR** Centre for Economic Policy Research Discussion Paper: 1646; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 24. **PR** 4 pounds or \$8.00. **JE** F33, F41, F42. **KW** Exchange-Rate Instability. Country Size. European Monetary Integration.

AB This paper analyzes how country size affects exchange

rate policy and volatility. A hump-shaped relation between exchange rate variability and the size of countries is generated in the theoretical model: exchange rate variability increases with country size for small countries, but then decreases for large countries. The paper finds that this theoretical prediction holds well for bilateral exchange rates of the OECD countries for the period 1980-95 as well as for a subsample of European exchange rates with respect to the dollar. The results suggest that dollar/euro volatility should be lower than the present dollar/Deutsche Mark volatility, but that the decrease may depend significantly on the size and composition of EMU.

Martin, Will

TI Economic Growth and Policy Reform in the APEC Region: Trade and Welfare Implications by 2005. **AU** Anderson, Kym; Martin, Will; Hertel, Tom; Dimaranan, Betina.

Martinez-Giralt, Xavier

TI On the Effects of Anti-Dumping Legislation. **AU** Barros, Pedro Pito; Martinez-Giralt, Xavier.

Masson, Paul R.

PD May 1997. **TI** Characteristics of the Euro, the Demand for Reserves, and Policy Coordination Under EMU. **AU** Masson, Paul R.; Turtelboom, Bart G. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/58; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not available. **JE** F31, F33, F41, F42, F47. **KW** European Union. Inflation. Monetary Policy. Exchange Rates. Monetary Targeting.

AB The success of European Economic and Monetary Union (EMU) will depend on the stability of the euro. The monetary policy framework is yet to be decided, but is likely to involve either money or inflation targeting. Stochastic simulations compare the outcomes for major macroeconomic and financial variables pre- and post-EMU under both policy rules, as well as under an inflation targeting rule that includes output. Implications for the euro as a reserve currency are examined in the light of the expected returns and covariances among reserve currencies. The role of the exchange rate as an indicator and incentives for policy coordination with other major countries are also discussed.

Maurel, Mathilde

PD March 1997. **TI** The New Geography of Eastern European Trade. **AU** Maurel, Mathilde; Cheikbossian, Guillaume. **AA** Maurel: OFCE, Universite de Paris. Cheikbossian: DELTA, Universite de Paris. **SR** Centre for Economic Policy Research Discussion Paper: 1580; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 44. **PR** 4 pounds or \$8.00. **JE** F13, F15. **KW** Transition Economies. Central Europe. Regional Disintegration.

AB This paper estimates the cost of the disintegration of the former Council for Mutual Economic Assistance (CMEA). It asks whether the reorientation of trade flows towards Western markets has been large enough to compensate for the huge destruction of trade flows between former CMEA countries. Given the severe recession and the reduction in export and import capacities, the answer to this question is not obvious. Furthermore, particular features of CMEA functioning imply

that the decrease in regional trade flows is not necessarily welfare-increasing. Two gravity equations are estimated on a panel of 14 years to give a picture of CMEA trade before and after the disintegration. Two conclusions emerge. First, despite the collapse of eastern trade, the increasing volume of trade flows with the West has not been large enough to compensate for the loss of regional markets. This is increasing, however, thanks to commercial policies which favor trade cooperation and liberalization. The second conclusion stresses the weakness of the regional market in the East, and the perverse effect of hub and spoke bilateralism, reinforced by the Europe Agreements. Similar regional eastern agreements have been signed as a result.

Max, Derrick A.

TI Implicit Budget Deficits: The Case of a Mandated Shift to Community-Rated Health Insurance. AU Bradford, David F.; Max, Derrick A.

Mazarei, Adnan

TI Fiscal Policy and Growth in the Middle East and North Africa Region. AU Eken, Sena; Helbling, Thomas; Mazarei, Adnan.

McCallum, Bennett T.

PD May 1996. TI Inflation Targeting in Canada, New Zealand, Sweden, the United Kingdom, and in General. AA Carnegie Mellon University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5579; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29. PR \$5.00. JE E31, E52, E58. KW Inflation Targeting. Dynamic Inconsistency. AB This paper begins with a description of the inflation targeting arrangements currently in place in the four above-mentioned countries and their performance records through mid-1995 are reviewed. It is argued, however, that too little time has passed for conclusions to be drawn, so that tentative evaluations of inflation targeting need to be based on theoretical analysis and more generalized historical experiences. Accordingly, two alternative rationalizations are considered, one stemming from the literature on dynamic inconsistency and the other based on more pragmatic considerations. In addition, it is asked whether some other nominal magnitude might be preferable as a target variable and the issue of growth-rate versus growing-level target paths is addressed.

PD May 1996. TI Crucial Issues Concerning Central Bank Independence. AA Carnegie Mellon University and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5597; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 14. PR \$5.00. JE E58. KW Precommitment. Central Banks. Dynamic Inconsistency. Monetary Economics.

AB This paper argues, first, that it is inappropriate to presume that central banks will, in the absence of any tangible precommitment technology, inevitably behave in a "discretionary" fashion that implies an inflationary bias. Furthermore, there is no necessary tradeoff between "flexibility and commitment." Second, to the extent that the absence of any precommitment technology is nevertheless a problem, it will apply to a consolidated central bank-plus-government entity as

well as to the central bank alone. Thus, contracts between governments and central banks do not overcome the motivation for dynamic inconsistency, they merely relocate it. Several implications are discussed.

McDermott, C. John

TI Fiscal Imbalances, Capital Inflows, and the Real Exchange Rate: The Case of Turkey. AU Agenor, Pierre-Richard; McDermott, C. John; Ucer, E. Murat.

McDermott, Shaun P.

TI Sulfur Dioxide Compliance of a Regulated Utility. AU Fullerton, Don; McDermott, Shaun P.; Caulkins, Jonathan P.

McLennan, Andrew

PD October 1996. TI Consequences of the Condorcet Jury Theorem for Beneficial Information Aggregation by Rational Agents. AA University of Minnesota. SR University of Minnesota Center for Economic Research Discussion Paper: 289; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 8. PR no charge. JE C70, D71, D82. KW Condorcet Jury. Teams Theory. Anonymity. Voting. Nash Equilibrium.

AB The Condorcet Jury Theorem pertains to elections in which the agents have common preferences but diverse information. We show that, whenever "sincere" voting leads to the conclusions of the Theorem -- decisions superior to those that would be made by any individual based on private information, and asymptotically correct decisions as the population becomes large -- there are also Nash equilibria with these properties, and in symmetric environments the equilibria may be taken to be symmetric. These conclusions follow from a simple property of common interest games: a mixed strategy profile of a (symmetric) common interest game that is optimal in the set of (symmetric) mixed strategy profiles is a Nash equilibrium.

TI On the Generic Finiteness of Equilibrium Outcome Distributions in Game Forms. AU Govindan, Srihari; McLennan, Andrew.

PD April 1997. TI Generic 4 x 4 Two Person Games Have At Most 15 Nash Equilibria. AU McLennan, Andrew; Park, In-Uck. AA McLennan: University of Minnesota. Park: University of Bristol. SR University of Minnesota Center for Economic Research Discussion Paper: 300; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 22. PR no charge. JE C72. KW Two Person Game. Nash Equilibrium. Game Theory.

AB The maximal generic number of Nash equilibria for two person games in which the two agents each have four pure strategies is shown to be 15. In contrast to Keiding (1995), who arrives at this result by computer enumeration, our argument is based on a collection of lemmas that constrain the set of equilibria. Several of these pertain to any common number of pure strategies for the two agents.

Merlo, Antonio

TI Pattern Bargaining. AU Marshall, Robert C.; Merlo, Antonio.

TI On the Political Economy of Income Distribution and Crime. **AU** Imrohorglu, Ayse; Merlo, Antonio; Rupert, Peter.

Michie, Jonathan

TI Technological Competitiveness in an International Arena. **AU** Howells, Jeremy; Michie, Jonathan.

Milesi-Ferretti, Gian Maria

TI Determinants of Korean Trade Flows and Their Geographical Destination. **AU** Giorgianni, Lorenzo; Milesi-Ferretti, Gian Maria.

Milne, Frank

TI The Existence of Equilibrium in a Financial Market with Transaction Costs. **AU** Jin, Xing; Milne, Frank.

TI The Existence of Equilibrium in a Financial Market with General Personal and Corporate Tax Structures. **AU** Jin, Xing; Milne, Frank.

Miron, Jeffrey A.

TI Why Does Inflation Differ Across Countries? **AU** Campillo, Marta; Miron, Jeffrey A.

Mishkin, Frederic

PD May 1996. **TI** Understanding Financial Crises: A Developing Country Perspective. **AA** Federal Reserve Bank of New York and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5600; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 45. **PR** \$5.00. **JE** D82, E52, E58, G28, O23. **KW** Banking. Monetary Policy. Fiscal Policy. Financial Crises. Development.

AB This paper explains the puzzle of how a developing economy can shift dramatically from a path of reasonable growth before a financial crisis to a sharp decline in economic activity after a crisis occurs. It does so by outlining an asymmetric information framework for analyzing banking and financial crises in developing countries. The asymmetric information framework shows why the banking sector is so important to the economy, particularly in developing countries and provides a rationale for bank regulation and supervision. This framework is then used to understand why banking and financial crises occur and why they can have such a devastating effect on the economy, particularly in developing countries. The paper concludes by discussing policy implications for developing countries. An important theme is that an appropriate institutional structure is critical to preventing banking and financial crises in developing.

Mitchell, Olivia S.

PD March 1996. **TI** Social Security Privatization: A Structure for Analysis. **AU** Mitchell, Olivia S.; Zeldes, Stephen P. **AA** Mitchell and Zeldes: University of Pennsylvania and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5512; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 11. **PR** \$5.00. **JE** H55, L33. **KW** Social Security. Pensions. Privatization.

AB This paper identifies the key economic issues that must

be addressed in the debate over a privatized social security system. We examine a two-pillar plan. The first pillar would consist of a demogrant: a small indexed pension of the same dollar amount for all retirees who had contributed to the system over a full lifetime of work. The second pillar would consist of a fully funded individual defined-contribution account, financed by payroll taxes, held in financial institutions, and directed by participants. We explore how such a system would affect the risks households face, how it would alter the distribution of income, and how it might influence household behavior, including incentive to work and save, and portfolio choices. We also examine macroeconomic issues: how the transition to a private plan would occur, and what the likely effects would be on national saving. We conclude that a two-pillar system offers several positive features, namely a reduction in political risk, an increase in household portfolio choice, and improved work incentives. Disadvantages include less redistributiveness and national risk sharing, and increased administrative costs.

Mitsui, Kiyoshi

PD November 1996. **TI** Ex ante Free Mobility, Ex post Immobility, and Time-Consistent Policy in a Federal System. **AU** Mitsui, Kiyoshi; Sato, Motohiro. **AA** Mitsui: Meijigakuin University. Sato: Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 941; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 27. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** H40, H77, J61, O15, R50. **KW** Population Distribution. Public Goods. Regional Analysis. Transfer Policy. Migration.

AB This paper examines regional population distribution when there is an interregional transfer policy without commitment. We introduce explicitly the following time structure of actions. Individuals make decisions on locational choices freely ex ante, but are immobile ex post. The interregional transfer policies by regional governments and the central government are implemented after individuals' migration decisions. We obtain the following results. First, locally stable time-consistent equilibria are single-community equilibria when there is a pure local public good. When we extend the basic model by taking account of capital, congestion, and spillovers in the provision of a public good, it is shown that whether or not central government intervention enhances the efficiency of the population distribution depends upon several economic factors.

Moene, Karl

TI Controlling Fiscal Corruption. **AU** Chand, Sheetal; Moene, Karl.

Mongelli, Francesco Paolo

PD July 1997. **TI** Effects of the European Economic and Monetary Union (EMU) on Taxation and Interest Spending of National Governments. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/93; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 30. **PR** not available. **JE** E63, F36, H20, H63. **KW** Economic Integration. Tax Harmonization. Monetary Policy. Fiscal Policy. European Union.

AB This paper examines the interest spending and taxation channels through which EMU could affect the public finances.

It provides a framework for examining different views on a further narrowing of interest rate differentials. A model of Blanchard and Fischer is amended to analyze the two channels, and empirical evidence on the tax harmonization process is presented. The paper argues that "high-debt" and "high-tax" countries pursuing prudent fiscal policies could benefit the most from EMU: if monetary and widespread fiscal discipline are jointly established, interest rates could decline rapidly, while tax harmonization is likely to be gradual.

Montgomery, Edward

PD March 1996. TI Cross-State Variation in Medicaid Programs and Female Labor Supply. AU Montgomery, Edward; Navin, John. AA Montgomery; University of Maryland and National Bureau of Economic Research. Navin: S.I.U.E. SR National Bureau of Economic Research Working Paper: 5492; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 19. PR \$5.00. JE I38, J16, J22. KW Medicaid. Labor Supply. AFDC. Women. Welfare. Female Labor.

AB Although the Medicaid program is partially controlled by the federal government, there is considerable latitude in the ability of states to set eligibility requirements and the types of services available to recipients. This research examines the impact of different state Medicaid programs on the decision to enter the labor force and the number of hours worked by female heads of households. A pooled cross-section data set constructed from the 1988 through 1993 Current Population Survey March Supplements is used to test if different benefit levels across states impact labor supply behavior. This study adds to the existing Medicaid literature by incorporating new benefit measures and explicitly controlling for state random and fixed effects. OLS results support the prediction that Medicaid expenditures reduce labor supply, but controlling for state fixed or random effects alters the effect of both the AFDC and Medicaid programs on both the decision to participate as well as the number of hours worked of female heads of households. We also consider the effects of policy endogeneity on these estimates using instruments for state welfare generosity and find evidence that estimates of the effect of welfare on labor supply are sensitive to the failure to control for time-varying policy endogeneity.

TI Do Workplace Smoking Bans Reduce Smoking?
AU Evans, William N.; Farrelly, Matthew C.; Montgomery, Edward.

Montgomery, John

PD April 1997. TI The Indonesian Financial System: Its Contribution to Economic Performance, and Key Policy Issues. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/45; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 26. PR not available. JE E21, E22, G14, G21, G28. KW Banking Systems. Financial Markets. Securities Markets. Indonesia.

AB The structure of the financial system in Indonesia is examined through the analytical lens of the system's contribution to the growth, stability, and efficiency of the Indonesian economy. The focus is on the banking system and securities markets, which are the primary mechanism for mobilizing savings and allocating investment funds. Five key policy issues are highlighted: (1) the level of bank

capitalization; (2) the supervision and regulation of banks; (3) the structure of banking markets; (4) the deepening of securities markets; and (5) the supervision and regulation of securities markets.

Moore, Barry

TI Internationalization Processes, Networking and Local Embeddedness in Technology-Intensive Small Firms. AU Keeble, David; Lawson, Clive; Lawton Smith, Helen; Moore, Barry; Wilkinson, Frank.

TI Internationalization Processes, Networking and Local Embeddedness in Technology-Intensive Small Firms. AU Keeble, David; Lawson, Clive; Lawton Smith, Helen; Moore, Barry; Wilkinson, Frank.

Motta, Massimo

PD April 1997. TI Advertising Bans. AA Universitat Pompeu Fabra. SR Centre for Economic Policy Research Discussion Paper: 1613; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 40. PR 4 pounds or \$8.00. JE K20, L13, M37. KW Advertising Bans. Product Differentiation. Regulation. Tobacco. Alcohol.

AB This paper shows that an advertising ban is more likely to increase - - rather than decrease -- total consumption when advertising does not bring about a large expansion of market demand at given prices and when it increases product differentiation (thus allowing firms to command higher prices). In this case, the main impact of a ban on advertising is to reduce equilibrium prices and thus increase demand. It is argued that this is more likely to happen in mature industries where consumer goods are ex-ante (i.e. without advertising) similar and advertising is of the "persuasive" type. The ban is more likely to increase firms' profits the weaker the ability of advertising to expand total demand and the less advertising serves to induce product differentiation.

Muellbauer, John

PD February 1997. TI Income Persistence and Macro-Policy Feedbacks in the United States. AA Centre for Economic Policy Research. SR Centre for Economic Policy Research Discussion Paper: 1557; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 56. PR 4 pounds or \$8.00. JE E32, E37, E63. KW Income Persistence. Policy Feedback Rules. Structural Breaks. Lucas Critique. Macro Forecasts.

AB This paper analyzes and forecasts annual time series of aggregate real income per head in the United States. The approach integrates elements from recent univariate time-series analyses with multi-equation macromodels in which policy feedback rules have been endogenized. The main conclusions are as follows. First, aggregate real per capita income is subject to significant trend reversion. This conclusion comes through more clearly by examining the data at an annual rather than the more usual quarterly frequency, and by incorporating multivariate economic content in the income process. Second, there is significant evidence for the Lucas (1976) or Haavelmo (1944) critique: in the United States there appears to have been a shift in the structural macro-policy reaction function causing a corresponding shift in the reduced-form income forecasting equation. This is associated with increased concern in the late 1980's over the size of U.S. budget deficits. Third, with the

above proviso, useful real income forecasts can be made as far as three years ahead. Finally, the paper provides empirical evidence for the effectiveness of monetary policy on real output or income. The change in the short-term interest rate is highly significant in forecasting income growth up to three years after the change.

PD March 1997. **TI** Booms and Busts in the UK Housing Market. **AU** Muellbauer, John; Murphy, Anthony. **AA** Muellbauer: Oxford University. Murphy: University College Dublin. **SR** Centre for Economic Policy Research Discussion Paper: 1615; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 26. **PR** 4 pounds or \$8.00. **JE** G14, R21. **KW** House Prices. Financial Liberalization. Asset Market Inefficiency. Price Volatility.

AB The often volatile behavior of UK house prices between 1957 and 1994 is analyzed in an annual econometric model. Theory suggests that financial liberalization of mortgage markets in the 1980's should have led to notable shifts in house price behavior. The evidence supports the predictions of theory, suggesting shifts took place in wealth effects, as in the consumption function, and that real interest rates and income expectations became more important. The presence of transactions costs suggests important non-linearities in house price dynamics. The paper also contains an explicit econometric treatment of expectations, demography, supply spillovers from the rented sector and of composition biases in the official house price index.

Muhleisen, Martin

PD January 1997. **TI** Improving India's Saving Performance. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/04; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 24. **PR** not available. **JE** E21, E62, O16, O53. **KW** India. Savings. Financial Markets. Fiscal Policy. Growth.

AB This paper discusses recent trends in Indian saving behavior and reviews policy options to increase domestic saving. In the absence of forceful policy measures, private saving would continue to rise gradually, but probably not by enough to finance the government's growth target of 7 percent over the next decade. The most promising way to boost domestic saving would be through increased public saving and a strong structural reform program, including financial liberalization, which would initiate a virtuous growth-saving circle. To increase the savings allocation, particular attention should be paid to long-term saving instruments.

Mulligan, Casey B.

PD March 1996. **TI** Adoption of Financial Technologies: Implications for Money Demand and Monetary Policy. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier X. **AA** Mulligan: University of Chicago. Sala-i-Martin: Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5504; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 42. **PR** \$5.00. **JE** E41, E44, E52. **KW** Financial Technology. Money Demand. Interest-Bearing Assets.

AB In this paper we argue that the relevant decision for the majority of U.S. households is not the fraction of assets to be

held in interest bearing form, but whether to hold any of such assets at all (we call this "the decision to adopt" the financial technology). We show that the key variable governing the adoption decision is the product of the interest rate times the total amount of assets. The implication is that, instead of studying money demand using time series and looking at historical interest rate variations, we can look at a cross-section of households and analyze variations in the amount of assets held. We can use this methodology to estimate the interest elasticity of money demand at interest rates close to zero. We find that (a) the elasticity of money demand is very small when the interest rate is small, (b) the probability that a household holds any amount of interest bearing assets is positively related to the level of financial assets, and (c) the cost of adopting financial technologies is positively related to age and negatively related to the level of education.

Murphy, Anthony

TI Booms and Busts in the UK Housing Market. **AU** Muellbauer, John; Murphy, Anthony.

Murray, Michael

TI When is the Standard Analysis of Common Property Extraction Under Free Access Correct? A Game-Theoretic Justification for Non Game-Theoretic Analyses. **AU** Brooks, Robin; Controneo, Jill; Murray, Michael; Salant, Stephen.

Mutti, John

PD April 1996. **TI** The Significance of International Tax Rules for Sourcing Income: The Relationship Between Income Taxes and Trade Taxes. **AU** Mutti, John; Grubert, Harry. **AA** Mutti: Grinnell College. Grubert: U.S. Department of the Treasury. **SR** National Bureau of Economic Research Working Paper: 5526; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 39. **PR** \$5.00. **JE** D51, F21, H21. **KW** Income Tax. International Tax Rules. Trade Taxes. Sourcing Income.

AB This paper examines how rules to determine the source of income internationally for tax purposes can have important effects on the form in which taxable income is reported and on the location of economic activity. In the case of U.S. law, two provisions are significant: allowing a portion of export income to be regarded as foreign source and treating royalties received as foreign source. These source rules have become increasingly important due to tax policy changes adopted in the 1980's and to the growing role in U.S. production and trade of goods that require intangible intellectual property. In addition, very similar transactions can be carried out as trade in goods, trade in services or production by a foreign affiliate, and tax incentives can influence that choice. How the source rules operate and the incentives they create are demonstrated in a set of stylized calculations to determine after-tax returns under various assumptions about relevant income and withholding tax rates, tariffs, and the importance of tangible and intangible capital in production. An assessment of the empirical importance of these provisions is based on recent studies of the determinants of trade and investment by U.S. multinational corporations.

Nadiri, M. Ishaq

PD March 1996. **TI** R&D, Production Structure and Productivity Growth: A Comparison of the US, Japanese, and

Korean Manufacturing Sectors. AU Nadiri, M. Ishaq; Kim, Seongjun. AA Nadiri: New York University and National Bureau of Economic Research. Kim: New York University. SR National Bureau of Economic Research Working Paper: 5506; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 27. PR \$5.00. JE D24, J24, O32. KW Manufacturing Sector. Resource Accumulation. Productivity.

AB We estimate and compare the production structures of the U.S., Japanese, and Korean total manufacturing sectors for the 1974-1990 period. We employ a translog variable cost function that includes such inputs as labor, materials, physical and R&D capital with the physical and R&D capital treated as quasi-fixed subject to adjustment costs. The paper provides estimates for markups, returns to scale, rates of return on physical and R&D capital, and technical change. The paper also identifies the sources of the growth of output, labor productivity, and total factor productivity. The results show that resource accumulation, not technical change, is the key factor in rapid output growth, and that the R&D capital and technical change have been major contributors of the TFP growth in the U.S. and Japanese manufacturing but not in the Korean manufacturing sector.

Nagayasu, Jun

TI On the Japanese Yen-US Dollar Exchange Rate: A Structural Econometric Model Based on Real Interest Differentials. AU MacDonald, Ronald; Nagayasu, Jun.

Nakanishi, Noritsugu

PD July 1995. TI Reexamination of the International Export Quota Game Through the Theory of Social Situations. AA Queen's University and Kobe University. SR Queen's Institute for Economic Research Discussion Paper: 928; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. PG 26. PR \$3.21 Canada; \$3.50 U.S. and Foreign. JE C72, F13, F41. KW International Trade. Quotas. Nash Equilibrium. Non-Cooperative Games.

AB It is a well-known theorem in international trade that a Nash equilibrium between two countries that set optimal quotas non-cooperatively is the complete elimination of international trade. Yet we know that countries do set quotas on one another and that trade is not eliminated. This paper explores the hypothesis that the discrepancy lies in the weakness of the Nash equilibrium concept. Specifically, the authors agree that the replacement of Nash equilibrium with Greenberg's (1990) concept of a "standard-of-behavior" yields a much more plausible result. The authors construct a model of quota retaliation as an "individual contingent threats situation." In a static, essentially non-cooperative setting, the authors show that every stable standard-of-behavior supports at least one Pareto-efficient combination of quotas and vice versa.

Navaretti, Giorgio Barba

TI From Learning to Partnership. Multinational R&D Cooperation in Developing Countries. AU Carraro, Carlo; Navaretti, Giorgio Barba.

Navin, John

TI Cross-State Variation in Medicaid Programs and Female

Labor Supply. AU Montgomery, Edward; Navin, John.

Nelson, Douglas

TI Population Growth, Trade Policy, and Migration Incentives. AU Francois, Joseph F.; Nelson, Douglas.

Neumark, David

TI Are Affirmative Action Hires Less Qualified? Evidence from Employer-Employee Data On New Hires. AU Holzer, Harry; Neumark, David.

TI Age Discrimination, Job Separations, and Employment Status of Older Workers: Evidence from Self-Reports. AU Johnson, Richard; Neumark, David.

Newbery, David M. G.

PD January 1997. TI Competition, Contracts and Entry in the Electricity Spot Market. AA University of Cambridge. SR University of Cambridge, Department of Applied Economics Working Paper. Amalgamated Series: 9707; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. PG 21. PR \$10.00 (5 pounds); checks payable to University of Cambridge. JE C72, D43, L13, L14, L94. KW Supply Function. Equilibrium. Electricity. Contract. United Kingdom.

AB The supply function model of the English electricity spot market is extended to include equilibrium in a contract market in the presence of entry threats, both of which have dramatic effects on the determination of equilibrium. The paper presents an analytically tractable model which can be solved with contracts, variable numbers of competitors, and capacity constraints. In a well-defined case, capacity binds and entrants have a comparative advantage in investment, otherwise their entry threat constrains prices, but consumers would prefer more incumbents.

PD April 1997. TI The Burden and Disincentive Effects of Hungarian Personal Taxes 1988-96. AU Newbery, David M. G.; Revesz, Tamas. AA Newbery: University of Cambridge. Revesz: Budapest University of Economic Sciences. SR Centre for Economic Policy Research Discussion Paper: 1570; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 40. PR 4 pounds or \$8.00. JE H21, P35, P52. KW Tax Reform. Tax Burden. Efficiency. Equity. Redistribution. Hungary.

AB The paper analyzes the revenue-raising, distributional and incentive effects of the personal tax system in Hungary from the start of the transitional tax reforms of 1988, and develops methods for estimating marginal indirect taxes. It evaluates the distributional impact of revenue-neutral equivalent indirect tax changes that have occurred since 1988, and shows them to have been regressive.

Ng, Serena

TI Parametric and Non-Parametric Approaches to Price and Tax Reform. AU Deaton, Angus; Ng, Serena.

Nielsen, Lars Tyge

TI Parametric Characterizations of Risk Aversion and Prudence. AU Lajeri, Fatma; Nielsen, Lars Tyge.

PD May 1997. TI Monotone Risk Aversion.

AA INSEAD. **SR** Centre for Economic Policy Research Discussion Paper: 1651; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 24. **PR** 4 pounds or \$8.00. **JE** D81. **KW** Risk Aversion. Decreasing Absolute Risk Aversion.

AB This paper shows that a strictly increasing and risk averse utility function with decreasing absolute risk aversion is necessarily differentiable with a positive and absolutely continuous derivative. The cumulative absolute risk aversion function, which is defined as the negative of the logarithm of the marginal utility, will also be absolutely continuous. Its density, called the absolute risk aversion density, is a generalization of the coefficient of absolute risk aversion, and it is well defined almost everywhere. A strictly increasing and risk averse utility function has decreasing absolute risk aversion if, and only if, it has a decreasing absolute risk aversion density and if, and only if, the cumulative absolute risk aversion function is increasing and concave. This leads to a convenient characterization of all such utility functions. Analogues of all the results also hold for increasing absolute risk aversion, as well as for increasing and decreasing relative risk aversion.

PD May 1997. **TI** Portfolio Selection and Asset Pricing With Dynamically Incomplete Markets and Time-Varying First and Second Moments. **AU** Nielsen, Lars Tyge; Vassalou, Maria. **AA** Nielsen: INSEAD. Vassalou: Columbia University. **SR** Centre for Economic Policy Research Discussion Paper: 1652; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 32. **PR** 4 pounds or \$8.00. **JE** G11, G12. **KW** Portfolio Optimization. Intertemporal CAPM. Incomplete Markets. Capital Market Line. Mutual Fund Separation.

AB This paper simplifies Merton's (1973) fund separation theorem by showing that investors will hold hedge funds in their optimal portfolio only to hedge against changes in the slope or position of the instantaneous capital market line. This result allows for incomplete markets and does not assume that the securities prices are Markovian. By aggregating, we derive a single factor capital asset pricing model (CAPM) with a constant capital market line, where the first and second moments of security returns may change over time and markets are potentially incomplete. This model is consistent with some autoregressive conditional heteroscedastic in mean (ARCH-M) and generalized ARCH-M (GARCH-M) specifications from the recent empirical literature. It differs from the consumption CAPM by allowing capital market incompleteness and by the fact that the single factor is the return to the market portfolio rather than aggregate consumption. The model resolves the paradox of Rosenberg and Ohlson (1976).

Nielsen, Soren Bo

TI Tax Avoidance and Value-Added vs. Income Taxation in an Open Economy. **AU** Gordon, Roger H.; Nielsen, Soren Bo.

Nolan, Peter

PD December 1996. **TI** The Chinese Army's Firm In Business: The Sanjiu Group. **AU** Nolan, Peter; Xiaoqiang, Wang. **AA** University of Cambridge. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9702; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3

9DE, United Kingdom. **PG** 27. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** D23, L11, L65, M21, N65. **KW** China. Industrial Reform. Property Rights. Productivity. Business.

AB China's fast economic growth after 1978 provided opportunities for existing large plants to grow into more complex, big businesses, stimulated especially by booming demand for their "upstream" products, such as steel, heavy machinery and petrochemicals. However, large firms emerged also from the ranks of new entrants and small producers, especially in "downstream" sectors, where barriers to entry tended to be lower. The object of this study, the Sanjiu Group, only came into existence in 1987. By the early 1990's it had risen to become China's largest pharmaceutical firm and one of China's top 100 firms. This paper analyzes the nature and causes of Sanjiu's explosive growth. This paper also analyzes the implications of Sanjiu's ownership by the Chinese army for theoretical debate concerning the relationship of property rights to firm performance in reforming Communist economies.

Noldeke, Georg

TI Sequential Investments and Options to Own. **AU** Schmidt, Klaus M.; Noldeke, Georg.

Norregaard, John

PD March 1997. **TI** The Tax Treatment of Government Bonds. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/25; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 23. **PR** not available. **JE** H21, H23, H26, H74, H87. **KW** Bonds. Taxation. Fiscal Deficits. Debt. Government Borrowing.

AB In their effort to finance fiscal deficits at a reasonable cost, governments compete with other users of financial capital. Governments, however, are in the unique position that they are the only debt suppliers that can determine the taxation of debt instruments they issue. Following an overview of the current tax treatment of government bonds in OECD countries, this paper argues that, on purely economic grounds, there are no reasons for exempting interest on government bonds. Administrative difficulties in capturing interest on many other debt instruments in the tax net may, however, provide a rationale for doing so.

Nyberg, Peter

PD July 1997. **TI** Authorities' Roles and Organizational Issues in Systemic Bank Restructuring. **AA** Board of the Bank of Finland and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/92; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 15. **PR** not available. **JE** E58, G21, G28, G34. **KW** Bank Restructuring. Banks. Central Banks.

AB Systemic bank restructuring must be the responsibility of one government authority only, with other authorities providing support and analytical help. The restructuring authority, whose tasks are enumerated and discussed, should preferably be a separate and temporary agency reporting to the finance ministry. Other solutions are possible but not recommended. Parliament should be involved in setting priorities and supervising the process, but political interference in restructuring operations should be avoided. Practical issues to consider include ensuring efficient cooperation between authorities; the arrangement of problem asset workout and

recovery; and restructuring of politically sensitive enterprises.

O'Connell, Stephen A.

TI Contrasting Monetary Regimes in Africa.
AU Honohan, Patrick; O'Connell, Stephen A.

Obstfeld, Maurice

PD April 1997. TI The Great Depression as a Watershed: International Capital Mobility Over the Long Run. AU Obstfeld, Maurice; Taylor, Alan M. AA Obstfeld: University of California, Berkeley. Taylor: Northwestern University. SR Centre for Economic Policy Research Discussion Paper: 1633; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 48. PR 4 pounds or \$8.00. JE E52, F33, N10. KW Great Depression. Capital Mobility. Capital Controls. Inconsistent Trinity.

AB This paper surveys the evolution of international capital mobility since the late-nineteenth century. It begins with an overview of empirical evidence on the fall and rise of integration in the global capital market. A discussion of institutional developments focuses on the use of capital controls and the pursuit of domestic macroeconomic policy objectives in the context of changing monetary regimes. A fundamental macroeconomic policy trilemma has forced policy-makers to trade off conflicting goals. The natural implication of the trilemma is that capital mobility has prevailed and expanded under circumstances of widespread political support either for an exchange rate subordinated monetary policy regime (e.g. the gold standard), or for a monetary regime geared mainly towards domestic objectives at the expense of exchange rate stability (e.g. the recent float). Through its effect on popular attitudes towards both the gold standard and the legitimate scope for government macroeconomic intervention, the Great Depression emerges as the key turning point in the recent history of international capital markets.

Ohkusa, Yasushi

TI Fast Track: Is it in the Genes? The Promotion Policy of a Large Japanese Firm. AU Ariga, Kenn; Brunello, Giorgio; Ohkusa, Yasushi.

Olarreaga, Marcelo

TI Lobbying and the Structure of Protection. AU Cadot, Olivier; de Melo, Jaime; Olarreaga, Marcelo.

Ostry, Jonathan

PD April 1997. TI Current Account Imbalances in ASEAN Countries: Are They a Problem? AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/51; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE E21, F32, F41, H62, O53. KW Current Account. Consumption Smoothing. Sustainability. ASEAN. Deficit.

AB Applying a consumption-smoothing model to five ASEAN countries reveals that excessive private consumption has not tended to characterize their widening external imbalances in recent years, except to a small degree in Indonesia and Malaysia. Beyond consumption smoothing, however, a number of factors influence the desirability of running large external deficits, including the level and composition of external liabilities, the flexibility of

macroeconomic policies, and the health of banking systems. Even when the current account deficit appears sustainable, there is a case to reduce it in order to lower the risks arising from such factors.

Paine, Sarah C. M.

PD August 1994. TI Conflicting Empires: The Myths of Russo-Chinese Border Relations. AA Stanford University. SR Stanford Hoover Institution International Studies Working Paper: 94/11; The Hoover Institution, Stanford University, Stanford, CA 94305. PG 24. PR no charge. JE N70, Z10. KW Russia. China. International Relations. AB This paper considers the period of Russo-Chinese relations beginning in 1858 with the signing of the Treaty of Aigun and continues through the establishment of the Mongolian People's Republic in 1924. The 1858-1924 period is crucial for understanding contemporary Russo-Chinese tensions because, first, it constitutes the formative period in modern Russo-Chinese relations - the issues that still bedevil contemporary relations came into being at this time. Second, these years encompass the evolution of the modern boundary which, due to its length and due to the size of the two countries involved, forms the keystone of the current balance of power in the Far East. Third, the tensions, which arose from this repartition of the Far East, set the tone for future Russo-Chinese disputes; indeed, the repartition goes far in explaining such critical events as the 1960 Sino-Soviet split.

Palmer, Karen

TI Environmental Regulation and Innovation: A Panel Data Study. AU Jaffe, Adam B.; Palmer, Karen.

Papaioannou, Michael

PD January 1997. TI Financial Innovations Involving the Greek Drachma. AU Papaioannou, Michael; Gatzonas, E. K. AA Papaioannou: International Monetary Fund. Gatzonas: La Verne University. SR International Monetary Fund Working Paper: WP/97/14; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 46. PR not available. JE E52, F31, F36, G15, G28. KW Greece. Foreign Exchange. Drachma. Financial Markets. Government Policy.

AB During the last decade, a number of new financial instruments and derivative products related to the Greek drachma have emerged in local as well as international capital markets. The paper analyzes the characteristics of these financial instruments which are traded in organized exchanges and over-the-counter (OTC) markets, and evaluates the conditions under which they have evolved. Drawing from legislative and industry developments in the European Union (EU) and the United States, the paper also examines the effects and implications of such developments for local markets and for the conduct of monetary and foreign exchange policies and argues for the need for sound macroeconomic policies.

Papell, David H.

TI Structural Change and International Trade. AU Ben-David, Dan; Papell, David H.

Park, In-Uck

TI Generic 4 x 4 Two Person Games Have At Most 15 Nash Equilibria. AU McLennan, Andrew; Park, In-Uck.

Parsons, George R.

TI Nesting Structure Choice in a Random Utility Model of Recreation Demand. **AU** Hauber, A. Brett; Parsons, George R.

Pauwels, Wilfried

TI Strategic Behavior Under European Anti-dumping Rules. **AU** Vandenbussche, Hylke; Pauwels, Wilfried; Weverbergh, Marcel.

Pedersen, Christian S.

PD June 1996. **TI** An Extended Family of Financial Risk Measures. **AU** Pedersen, Christian S.; Satchell, Stephen E. **AA** University of Cambridge. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9623; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 18. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** C43, D81, G10. **KW** Risk Measure. Arrow-Pratt. Uncertainty.

AB Recalling the class of risk measures introduced by Stone (1973), the authors survey measures from several academic disciplines including psychology, economics and finance, which have been introduced since 1973. The authors introduce a general class of risk measures which extends Stone's class to include these new measures. Finally, the authors give three axioms that describe necessary attributes of a good financial risk measure, and show which of all measures surveyed satisfy these. The authors demonstrate that all measures which satisfy their axioms, as well as those which do not, but are commonly used in finance, belong to this new generalized class.

Perotti, Roberto

TI Budget Deficits and Budget Institutions. **AU** Alesina, Alberto; Perotti, Roberto.

Persson, Torsten

PD April 1996. **TI** Monetary Cohabitation in Europe. **AU** Persson, Torsten; Tabellini, Guido. **AA** Persson: Stockholm University and National Bureau of Economic Research. Tabellini: Institute for Economic Research. **SR** National Bureau of Economic Research Working Paper: 5532; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 24. **PR** \$5.00. **JE** E42, E52, F33, F42. **KW** Monetary Policy. Monetary Union. Europe.

AB How can monetary policy in stage III of European Monetary Union be coordinated between the "ins" and the "outs"? This paper compares alternative institutional mechanisms, and concludes that a generalized system of inflation targets at the European level has several merits. It strengthens domestic credibility of monetary policy. It rules out deliberate attempts to gain competitiveness through devaluations. It forces monetary policy to respond automatically to various macroeconomic shocks which is stabilizing for the real exchange rate. It distributes these shocks symmetrically across countries. On the basis of a simple theoretical model of policy coordination, the paper shows that a system of inflation targets approximates an optimal policy of international cooperation. Preliminary empirical evidence supports these theoretical results.

Pesaran, M. Hashem

PD September 1996. **TI** Testing for the Existence of a Long-Run Relationship. **AU** Pesaran, M. Hashem; Shin, Yongcheol; Smith, Richard J. **AA** Pesaran and Shin: University of Cambridge. Smith: University of Bristol. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9622; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 18. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** C12, C22, C32. **KW** Long-Run. Error Correction. Cointegration.

AB This paper develops a new approach to testing for the existence of a linear long-run relationship, when the orders of integration of the underlying regressors are not known with certainty. The test is the standard Wald of F statistic for testing the significance of the lagged levels of the variables in a first-difference regression. The asymptotic distributions of these statistics are non-standard under the null hypothesis that there exists no long-run relationship between the levels of the included variables. The authors provide two sets of asymptotic critical values; one set assuming that all the regressors are $I(1)$, and another set assuming that they are all $I(0)$. These two sets of critical values provide a band covering all possible classifications of the regressors into $I(0)$, $I(1)$ or mutually cointegrated. In view of this result the authors propose a bounds testing procedure.

PD November 1996. **TI** A Recursive Modelling Approach to Predicting. **AU** Pesaran, M. Hashem; Timmermann, Allan. **AA** Pesaran: University of Cambridge. Timmermann: University of California San Diego. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9625; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 21. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** G11, G12, E17, E44. **KW** Stock Returns. Forecasting. Recursive Modelling. Switching Portfolio. United Kingdom.

AB Using a recursive modelling procedure which generalizes existing methods for simulating investors' search in "real time" for a model that can forecast stock returns, the authors demonstrate the extent to which monthly stock returns in the U. K. were predictable during the period 1970-1993. Owing to a set of unique historical circumstances, U. K. stock returns were extremely volatile in 1974-5, and the authors discuss how to design a modelling approach which aims to account for this episode. Evidence is found of both long-term and short-term predictability in U. K. stock returns, which could have been exploited by investors to improve on the risk-return trade-off offered by a passive strategy in the market portfolio.

PD February 1997. **TI** Structural Analysis of Vector Error Correction Models With Exogenous $I(1)$ Variables. **AU** Pesaran, M. Hashem; Shin, Yongcheol; Smith, Richard J. **AA** Pesaran and Shin: University of Cambridge. Smith: University of Bristol. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9706; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 25. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** C12, C13, C32. **KW** Error Correction. Cointegration. Unit Roots.

Likelihood Ratio. Model Misspecification.

AB This paper presents two generalizations of the existing cointegration analysis literature. Firstly, the problem of efficient estimation of vector error correction models containing I(1) exogenous variables is considered and the asymptotic distributions of the log-likelihood ratio statistics for testing cointegrating rank are derived under different intercept and trend specifications and the respective critical values are tabulated. Tests of the co-trending hypothesis are developed together with model misspecification tests. Secondly, the paper considers the problem of efficient estimation of vector error correction models when the lag lengths of the included stationary variables may differ within and between equations. The purchasing power parity and the uncovered interest rate parity hypotheses are re-examined using U. K. data under the maintained assumption of exogenously given foreign prices.

TI Solution of Multivariate Linear Rational Expectations Models and Large Sparse Linear Systems. **AU** Binder, Michael; Pesaran, M. Hashem.

PD May 1997. **TI** Diagnostics for IV Regressions. **AU** Pesaran, M. Hashem; Taylor, Larry W. **AA** Pesaran: University of Cambridge. Taylor: Lehigh University. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9709; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 9. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** C30, C52. **KW** IV Regressions. Diagnostic Statistics. Goodness-of-Fit. Misspecification. Heteroskedasticity.

AB The use of residuals from the structural equations in a simultaneous-equations model can lead to misleading measures of association and to invalid diagnostic statistics for heteroscedasticity and functional form misspecifications. The issue of appropriate measures of goodness-of-fit for IV regression is addressed in Pesaran and Smith (1994). This paper considers the problem of appropriate construction of diagnostics for IV regressions, and proposes simple tests for functional form misspecifications and heteroscedasticity.

PD May 1997. **TI** Generalised Impulse Response Analysis in Linear Multivariate Models. **AU** Pesaran, M. Hashem; Shin, Yongcheol. **AA** University of Cambridge. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9710; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 7. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** C13, C32, C51. **KW** Impulse Response. Vector Autoregression. Cointegration. Great Ratios.

AB Building on Koop, Pesaran and Potter (1996), we propose the "generalized" impulse response analysis for unrestricted vector autoregressive (VAR) and cointegrated VAR models. Unlike the traditional impulse response analysis, our approach does not require orthogonalization of shocks and is invariant to the ordering of the variables in the VAR. In particular, we show that in general both generalized and orthogonalized impulse responses are equivalent only when the effects of the shock for the first equation in the VAR are examined. We also provide an empirical illustration showing that the two impulse responses could differ substantially.

Petersen, Mitchell

PD June 1996. **TI** Trade Credit: Theories and Evidence. **AU** Petersen, Mitchell; Rajan, Raghuram. **AA** Petersen: Northwestern University. Rajan: University of Chicago and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5602; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 27. **PR** \$5.00. **JE** E51, G21, G32, L14. **KW** Trade Credit. Loans. Supplier Lending. Corporate Finance.

AB In addition to borrowing from financial institutions, firms may be financed by their suppliers. This paper focuses on a sample of small firms whose access to capital markets may be limited. The paper finds evidence that firms use trade credit relatively more when credit from financial institutions is not available. Suppliers lend to firms no one else lends to because they may have a comparative advantage in getting information about buyers cheaply, they may have a better ability to liquidate goods, and they may have a greater implicit equity stake in the firm's long term survival. The paper finds some evidence consistent with the use of trade credit as a means of price discrimination. Finally, the paper finds that firms with better access to credit from financial institutions offer more trade credit. This suggests that firms may intermediate between institutional creditors and other firms.

Petrakos, George

TI Economic Developments in the Balkan Countries and the Role of Greece: From Bilateral Relations to the Challenge of Integration. **AU** Christodoulakis, Nicos M.; Petrakos, George.

Pischke, Jorn-Steffen

TI A Statistical Analysis of Crime Against Foreigners in Unified Germany. **AU** Krueger, Alan B.; Pischke, Jorn-Steffen.

TI Why Do Firms Train? Theory and Evidence. **AU** Acemoglu, Daron; Pischke, Jorn-Steffen.

TI The Returns to Computer Use Revisited: Have Pencils Changed the Wage Structure Too? **AU** DiNardo, John; Pischke, Jorn-Steffen.

Pistaferri, Luigi

TI Using Subjective Income Expectations to Test for Excess Sensitivity of Consumption to Predicted Income Growth. **AU** Jappelli, Tullio; Pistaferri, Luigi.

Pollitt, Michael G.

PD January 1997. **TI** The Restructuring and Privatisation of the Electricity Supply Industry in Northern Ireland -- Will it be Worth it? **AA** University of Cambridge. **SR** University of Cambridge, Department of Applied Economics Working Paper, Amalgamated Series: 9701; Department of Applied Economics, University of Cambridge, Sidgwick Avenue, Cambridge CB3 9DE, United Kingdom. **PG** 20. **PR** \$10.00 (5 pounds); checks payable to University of Cambridge. **JE** D61, H43, L33, L94, Q48. **KW** Cost Benefit. Electricity. Productivity. Privatization. Restructuring.

AB Until 1992, the electricity supply industry in Northern Ireland was controlled by a single state-owned enterprise. It was then restructured into three new generating companies and a transmission and distribution company, all of which were

privatized. Since then, unit costs have fallen sharply but prices have risen relative to the rest of the United Kingdom. This paper conducts a social cost-benefit analysis of the restructuring and privatization by looking at the efficiency gains and the actual and future investment and environmental effects of the process. It concludes that relative to the central counterfactual, the net gains are equivalent to a permanent cost reduction of 6% per annum, consumers pay 13% higher prices, while the government gains around £1.3bn in asset sales and higher tax revenue.

Poterba, James M.

PD April 1996. **TI** Do Budget Rules Work? **AA** Massachusetts Institute of Technology and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5550; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 50. **PR** \$5.00. **JE** H61, H72. **KW** Budget Rules. Fiscal Institutions.

AB The design of budget rules and institutions, long a neglected area in public finance and macroeconomics, has recently been thrust to center stage by the debate over a balanced budget amendment and other deficit-reduction measures in the United States. This paper describes the existing evidence on how budget rules affect fiscal policy outcomes. It contrasts the "institutional irrelevance view," which holds that budget rules can be circumvented by modifying accounting practices and changing the nominal timing or other classification of taxes and expenditures, with the "public choice view" in which fiscal institutions represent important constraints on the behavior of political actors. Several distinct strands of empirical evidence, from the U.S. federal experience with anti-deficit rules, from U.S. state experience with balanced budget rules, and from international comparisons of budget outcomes in nations with different fiscal institutions, suggest that fiscal institutions do matter. These results reject the institutional irrelevance view. The existing evidence is not refined enough, however, to provide detailed advice on how narrowly-defined changes in budget rules might affect policy outcomes.

PD May 1996. **TI** Personal Retirement Saving Programs and Asset Accumulation: Reconciling the Evidence. **AU** Poterba, James M.; Venti, Steven; Wise, David. **AA** Poterba: Massachusetts Institute of Technology and National Bureau of Economic Research. Venti: Dartmouth College and National Bureau of Economic Research. Wise: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5599; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 95. **PR** \$5.00. **JE** E21, G23, H20, J26. **KW** Saving. Heterogeneity. Individual Retirement Account. 401k.

AB This paper provides a summary and some additional results of a series of analyses of the effect of IRA and 401(k) contributions on net personal saving. Saver heterogeneity is the key impediment to determining the saving effect of these plans. In the authors' view, the weight of the evidence, based on the many non-parametric approaches discussed, provides strong support for the view that contributions to both IRA and 401(k) plans represent largely new saving. Several other investigators have used different methods to consider the effect of these retirement saving programs on personal saving and in some

cases have reached very different conclusions from the authors'. Thus they have devoted particular effort to trying to reconcile the results. Particular attention is devoted to a recent paper by Gale and Scholz [1994] demonstrating that IRA's have no saving effect, which the authors find to reach conclusions inconsistent with the raw data.

TI Stock Market Yields and the Pricing of Municipal Bonds. **AU** Mankiw, N. Gregory; Poterba, James M.

Pradhan, Mahmood

TI Financial Liberalization and Money Demand in ASEAN Countries: Implications for Monetary Policy. **AU** Dekle, Robert; Pradhan, Mahmood.

Prasad, Eswar S.

PD January 1997. **TI** Labor Market Adjustment in Canada and the United States. **AU** Prasad, Eswar S.; Thomas, Alun. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/02; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 21. **PR** not available. **JE** E24, E32, J22, J65. **KW** Canada. Employment. Labor Markets. Unemployment Insurance. Wages.

AB This paper provides a quantitative assessment of the relative importance of different labor market adjustment mechanisms in Canada and the United States and also examines the effects of the unemployment insurance (UI) system on labor market adjustment. At the aggregate level, employment growth shocks result in similar unemployment rate responses but smaller wage responses in Canada relative to the United States. Although overall UI generosity has increased aggregate unemployment persistence in Canada, the endogenous component of UI has affected unemployment persistence only marginally. The lower degree of aggregate real wage flexibility in Canada has not been an important determinant of unemployment persistence.

TI Possible Effects of European Monetary Union on Switzerland: A Case Study of Policy Dilemmas Caused by Low Inflation and the Nominal Interest Rate Floor. **AU** Laxton, Douglas; Prasad, Eswar S.

Prati, Alessandro

PD May 1997. **TI** European Monetary Union and International Capital Markets: Structural Implications and Risks. **AU** Prati, Alessandro; Schinasi, Garry J. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/62; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 58. **PR** not available. **JE** F21, F33, F36, G15. **KW** Euro. European Union. Capital Markets. Capital Flows. Financial Markets.

AB This paper analyzes the structural implications of EMU for international capital markets. It discusses the potential size of euro capital markets and the existing roles of European currencies in international capital markets. The paper also examines the euro's impact on international securities markets, including the role of the ECB, the evolution of EMU securities markets, and aspects of systemic risk management. The implications for wholesale and retail banking markets are also discussed, as are the broader implications of the introduction of the euro for changes in international capital flows, international portfolios, and by implication exchange rates.

Prem, Roohi

PD March 1997. TI International Currencies and Endogenous Enforcement -- An Empirical Analysis. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/29; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 23. PR not available. JE E40, F01, F33, F41. KW Currency. Endogenous Enforcement. International Finance. Monetary Performance.

AB This paper investigates the determinants of the international role of a currency. It argues that standard determinants such as monetary performance and financial openness are at best imperfect indicators of a currency's stability prospects, because the issuer's promise of stability is not exogenously enforceable. The paper advocates an enforcement approach to international currencies that makes explicit the underlying incentive incompatibilities. Additional enforcement determinants of currency internationalization are identified. The model is estimated using time-series cross-sectional analysis for three data sets. Monetary performance-related standard determinants fail to exhibit explanatory power, whereas the enforcement determinants are strongly significant and robust.

Price, Robert

PD January 1997. TI The Rationale and Design of Inflation-Indexed Bonds. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/12; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 55. PR not available. JE E31, E52, G19, H63. KW Indexed Bonds. Financial Markets. Debt Management. Monetary Policy. Inflation Indexation.

AB A number of industrialized countries have recently offered inflation-indexed bonds. Some members of another group of countries that had earlier adopted more comprehensive indexation in response to high inflation have taken steps to reduce the scope of indexation in their economies. This paper surveys debt management, monetary policy, and welfare arguments on the use of inflation-indexed bonds, and relates these to the experiences of various issuers. The paper also considers some important design features of indexed bonds.

Puga, Diego

PD February 1997. TI The Rise and Fall of Regional Inequalities. AA London School of Economics. SR Centre for Economic Policy Research Discussion Paper: 1575; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 56. PR 4 pounds or \$8.00. JE F12, F15, R12. KW Agglomeration. Regional Integration. Migration. Linkages.

AB This paper analyses how the degree of regional integration affects regional differences in production structures and income levels. With high transport costs, industry is spread across regions to meet final consumer demand. As transport costs fall, increasing returns interacting with labor mobility and/or input-output linkages between firms create a tendency for the agglomeration of increasing returns activities. When workers migrate towards locations with more firms and higher real wages, this intensifies agglomeration. When workers do not move across regions, further reductions in transport costs make firms increasingly sensitive to wage differentials, and may lead

industry to spread out again.

Qian, Yingyi

PD April 1997. TI Pareto-Improving Economic Reforms through Dual-Track Liberalization. AU Qian, Yingyi; Roland, Gerard; Lau, Lawrence J. AA Qian: Stanford University. Roland: Universite Libre de Bruxelles. Lau: Stanford University. SR Centre for Economic Policy Research Discussion Paper: 1595; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 16. PR 4 pounds or \$8.00. JE D50, D60, P21, P22, P41. KW General Equilibrium. Dual-Track Liberalization. Pareto-Improving Reforms.

AB Pareto-improving economic reforms that also simultaneously achieve efficiency can be implemented through a strategy of "dual-track" liberalization. Its success requires the feasibility of the original plan and its continued enforcement by the state. The Chinese experience demonstrates that such a strategy works.

Quah, Danny T.

PD March 1997. TI Empirics for Growth and Distribution: Stratification, Polarization, and Convergence Clubs. AA London School of Economics. SR Centre for Economic Policy Research Discussion Paper: 1586; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 60. PR 4 pounds or \$8.00. JE C13, C33, F43, O30. KW Convergence. Distribution Dynamics. Income Distribution. Inequality. Twin Peaks.

AB This paper studies cross-country patterns of economic growth from the viewpoint of income distribution dynamics. Such a perspective raises new empirical and theoretical issues in growth analysis: the profound empirical regularity is an "emerging twin peaks" in the cross-sectional distribution, not simple patterns of convergence or divergence. The theoretical problems raised concern interaction patterns among sub-groups of economies, not only problems of a single economy's accumulating factor inputs and technology for growth.

Rajan, Raghuram

TI Trade Credit: Theories and Evidence. AU Petersen, Mitchell; Rajan, Raghuram.

Ramaswamy, Ramana

TI Monetary Policy and Leading Indicators of Inflation in Sweden. AU Baumgartner, Josef; Ramaswamy, Ramana; Zettergren, Goran.

TI Deindustrialization: Causes and Implications. AU Rowthorn, Robert; Ramaswamy, Ramana.

Rassenti, Steve

TI Design of a Coordination Process for Cost Sharing. AU Loehman, Edna Tusak; Rassenti, Steve.

Rauch, James

PD June 1996. TI Networks Versus Markets in International Trade. AA University of California, San Diego and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5617; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 29.

PR \$5.00. **JE** C78, D83, F13, F41. **KW** International Trade. Search. Barriers to Trade.

AB I propose a network/search view of international trade in differentiated products. I present evidence that supports the view that proximity and common language/colonial ties are more important for differentiated products than for products traded on organized exchanges in matching international buyers and sellers, and that search barriers to trade are higher for differentiated than for homogeneous products. I also discuss alternative explanations for the findings.

PD June 1996. **TI** Trade and Search; Social Capital, Sogo Shosha, and Spillovers. **AA** University of California, San Diego and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5618; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** D83, F12, F13, F41. **KW** Search. International Trade. Export Promotion. Differentiated Products. Sogo Shosha.

AB A network/search view of international trade in differentiated products is proposed. It is shown that this view can explain the importance of ethnic and extended family ties in trade, the success of diversified trading intermediaries such as Japan's sogo shosha, and the ubiquity of government export promotion policies such as subsidized trade missions.

Rauscher, Michael

PD April 1997. **TI** Interjurisdictional Competition and the Efficiency of the Public Sector: The Triumph of the Market over the State? **AA** Universitat Rostock. **SR** Centre for Economic Policy Research Discussion Paper: 1624; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 14. **PR** 4 pounds or \$8.00. **JE** F20, H21, H40, H73. **KW** Tax Competition. Capital Movements. Infrastructure. Public Choice.

AB It has been argued in the literature that interjurisdictional competition forces the public sector to increase its efficiency and thus helps to tame Leviathan governments. The paper addresses this hypothesis by means of a simple tax-competition model with a Leviathan state. It is seen that the effects of increased factor mobility on the efficiency of the public sector are ambiguous. A calibration of the model shows that a reduction in public-sector efficiency is possible for parameter constellations which are not unrealistic.

Razin, Assaf

PD March 1996. **TI** Tax Principles and Capital Inflows: Is It Efficient to Tax Nonresident Income? **AU** Razin, Assaf; Sadka, Efraim; Yuen, Chi-Wa. **AA** Razin: International Monetary Fund and National Bureau of Economic Research. Sadka: Tel Aviv University. Yuen: University of Hong Kong. **SR** National Bureau of Economic Research Working Paper: 5513; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** F21, F35, H25, H32. **KW** Tax Principles. Capital Inflows. Tax Structure.

AB Even though financial markets today show a high degree of integration, the world capital market is still far from the textbook story of high capital mobility. The failure to have a tax scheme in which the rate of returns across countries are equated can result in inefficient capital flows across countries. This comes from the interactions of market failure and the tax

system. The purpose of this paper is to highlight some key sources of market failure in the context of international capital flows and to provide guidelines for efficient tax structure in the presence of capital market imperfections. We distinguish among three main types of international capital flows: foreign portfolio debt investment (FPDI), foreign portfolio equity investment (FPEI), and foreign direct investment (FDI). The paper emphasizes the efficiency of a non-uniform tax treatment of the various vehicles of international capital flows.

PD March 1997. **TI** Capital Mobility and the Output-Inflation Tradeoff. **AU** Razin, Assaf; Yuen, Chi-Wa; Loungani, Prakash. **AA** Razin: Tel Aviv University. Yuen: University of Hong Kong. Loungani: Federal Reserve Board. **SR** Centre for Economic Policy Research Discussion Paper: 1577; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 32. **PR** 4 pounds or \$8.00. **JE** H10. **KW** Capital Mobility. Sacrifice Ratio. Exchange Rate. Disinflation. Income Growth. Mean Inflation.

AB A common feature for developing countries that have experienced a sharp drop in inflation without large output losses is the extensive use of capital controls. This study shows that capital controls significantly improve the sacrifice ratio. This element contributes to the explanation of small output losses during disinflations, in addition to the high inflation mean and large nominal output variability in the pre-stabilization phase. A useful concept for disinflation episodes is the sacrifice ratio; the percentage decline in the rate of unemployment with 1% fall in the rate of inflation. The lower this ratio the less painful is disinflation. The new classical approach, pioneered by Lucas (1973), emphasized the variability of nominal GNP growth as a main determinant of the trade-off. The argument is based on the real-nominal confusion of price and output setters. In contrast, the new Keynesian approach, as in Ball, Mankiw and Romer (1988), emphasized the menu costs determinants of the trade-off. That is, in the presence of fixed costs of changing prices, the Phillips curve is expected to be steeper, the higher is the expected rate of inflation, since with higher expected inflation and more frequent price changes, nominal shocks will have smaller real effects.

PD June 1997. **TI** Tax Burden and Migration: A Political Economy Perspective. **AU** Razin, Assaf; Sadka, Efraim. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/78; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 12. **PR** not available. **JE** F22, H20, J10, J24, J61. **KW** Taxation. Redistribution. Migration. Human Capital. Tax Incidence.

AB The extent of taxation and redistribution policy is generally determined at a political-economy equilibrium by a balance between those who gain and those who lose from a more extensive tax-transfer policy. In a stylized model of migration and human capital formation, we find, somewhat against conventional wisdom, that low-skill migration may lead to a lower tax burden and less redistribution than no migration, even though the migrants join the pro-tax coalition.

Rebelein, Robert P.

PD November 1996. **TI** The Effect of Strategic Behavior on Ricardian Equivalence. **AA** University of Minnesota. **SR** University of Minnesota Center for Economic Research

Discussion Paper: 294; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. PG 26. PR no charge. JE D91, E60, H22, H31, H41. KW Strategic Behavior. Ricardian Equivalence. Altruism. Taxation. Public Goods.

AB The presence of strategic behavior is often believed to be sufficient to negate the neutrality assertions of the Ricardian Equivalence Theorem. I present a two-period, two-consumer (parent and child) model with one-sided altruism. The child behaves strategically in the sense that he seeks to manipulate the size of the parent's second period transfer. The parent behaves strategically as he seeks to minimize this manipulation. I show that, for general utility functions, this form of strategic behavior does not alter the effects of a change in the timing and incidence of a lump-sum tax. The intuition for this result derives from the fact that the child's utility is a public good. Under certain conditions (present in this model) wealth redistributions have no effect on total voluntary contributions to a public good.

Rebelo, Sergio

PD March 1997. TI Equilibrium Unemployment. AU Rebelo, Sergio; Gomes, Joao; Greenwood, Jeremy. AA University of Rochester. SR Centre for Economic Policy Research Discussion Paper: 1602; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 48. PR 4 pounds or \$8.00. JE E24, E32. KW Business Cycles. Unemployment.

AB A search-theoretic general equilibrium model of frictional unemployment is shown to be consistent with some of the key regularities of unemployment over the business cycle. In the model the return to a job moves stochastically. Agents can choose either to quit and search for a better job, or continue working. Search generates job offers that agents can accept or reject. Two distinguishing features of current work, relative to the existing business cycle literature on labor market fluctuations, are: (i) the decision to accept or reject jobs is modeled explicitly; and (ii) there is imperfect insurance against unemployment.

Redmond, Gerry

TI Poverty in the U. K. and Hungary: Evidence From Household Budget Surveys. AU Collins, Grainne; Redmond, Gerry.

TI Child Poverty, Economic Transition and Welfare State Regimes. AU Jarvis, Sarah; Redmond, Gerry.

Reichlin, Lucrezia

TI National Policies and Local Economies: Europe and the United States. AU Forni, Mario; Reichlin, Lucrezia.

Reiffen, David

PD September 1997. TI Discriminatory Dealing with Downstream Competitors: Evidence from the Cellular Industry. AU Reiffen, David; Schumann, Laurence; Ward, Machael. AA Reiffen: Federal Trade Commission. Schumann: Glassman-Oliver Economic Consultants. Ward: University of Illinois. SR Federal Trade Commission Bureau of Economics Working Paper: 215; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Room 3110, Washington, D.C. 20580. PG 41. PR no charge.

JE L43, L89. KW Discriminatory Dealing. Vertical Integration. Regulation. Cellular Phones.

AB Concern over regulated monopolies entering unregulated vertically-related markets is grounded in the incentives for such firms to cross-subsidize their unregulated enterprises or discriminate against competitors in the unregulated market. However, a prohibition against regulated monopolies offering related goods may forfeit the benefits of production by the regulated monopolies offering related goods may forfeit the benefits of production by the most efficient provider. We take advantage of cross-sectional variation across geographic cellular markets to examine the empirical importance of this discrimination and efficiency effects. This cross-sectional variation takes three forms: differences in the percentage of interconnection facilities in a cellular market owned by each phone company, the percentage of wireline end customers served by each local phone company, and in the percentage of the cellular companies' equity owned by each local telephone company. Consistent with the discrimination hypothesis, greater ownership of interconnection facilities is associated with lower quality and lower output of cellular phone service. However, consistent with the efficiency hypothesis, a greater fraction of customers served is associated with higher cellular quality and greater output. The estimated magnitudes of these effects imply the discrimination and efficiency effects of greater integration tend to offsetting. Higher equity ownership in the cellular company by the phone company leads to higher prices (which is consistent with either hypothesis) and no discernable effect on quality of quantity.

Reinhart, Carmen

TI Leading Indicators of Currency Crises. AU Kaminsky, Graciela; Lizondo, Saul; Reinhart, Carmen.

Reitzes, James D.

PD November 1995. TI Entry Policy and Entry Subsidies. AU Reitzes, James D.; Grawe, Oliver R. AA Reitzes: Ernest & Young LLP. Grawe: Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 212; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Room 3110, Washington, D.C. 20580. PG 29. PR no charge. JE D43, D82, F13, H21. KW Strategic Investment. Incentive Contracts. Adverse Selection. Entry Policy.

AB We provide a theory that explains why governments may allow free entry and selectively promote entry in certain cases while deterring entry in others. The analysis also identifies conditions where large-scale entry is permitted while small-scale entry is deterred. We also identify situations where a government may choose to promote foreign entry. The optimal entry promoting policy under complete information involves a two-part scheme, consisting of a per-unit output subsidy and a lump-sum subsidy. Since the optimal subsidy levels depend upon the entrant's costs, the policymaker acting under incomplete information must devise a subsidy schedule that separates entrants with different costs. This creates a formidable adverse-selection problem that cannot be overcome without considering alternative subsidy structures.

Revesz, Tamas

TI The Burden and Disincentive Effects of Hungarian Personal Taxes 1988- 96. AU Newbery, David M. G.; Revesz, Tamas.

Rey, Helene

TI *Enterprises in Transition: Macroeconomic Influences on Enterprise Decision-making and Performance.* AU Buiter, Willem H.; Lago, Ricardo; Rey, Helene.

Ricci, Luca A.

PD June 1997. **TI** *A Model of an Optimum Currency Area.* AA University of Konstanz and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/76; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 35. **PR** not available. **JE** E42, E52, E63, F20, F41. **KW** Currency Area. Cost Benefit Analysis. Exchange Rates. Currency Union. Monetary Integration.

AB This paper investigates the circumstances under which it is beneficial to participate in a currency area. A two-country monetary model of trade with nominal rigidities encompasses the real and monetary arguments suggested by the optimum currency area literature: correlation of real shocks, international factor mobility, fiscal adjustment, openness, difference in national inflationary biases, correlation of monetary shocks, and benefits of a single currency. The effect of openness on the net benefits is ambiguous, contrary to the usual argument that more open economies are better candidates for a currency area. Countries do not necessarily agree on whether a given currency union should be created.

Richter, Marcel K.

PD December 1996. **TI** *Bounded Rationalities and Definable Economies.* AU Richter, Marcel K.; Wong, Kam-Chau. AA Richter: University of Minnesota. Wong: Chinese University of Hong Kong. **SR** University of Minnesota Center for Economic Research Discussion Paper: 295; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 54. **PR** no charge. **JE** C62, D11, D51. **KW** Bounded Rationality. Consumer Theory. Definability. General Equilibrium. Predicate Logic.

AB Classical economic agents perform arbitrarily complex operations on arbitrarily complex magnitudes. By contrast, real world agents have bounds on their abilities to perceive, think about, calculate with, and communicate magnitudes. There are many ways to model agents with bounded abilities, and here two are mentioned -- one through bounds on computational abilities and one through bounds on descriptive or definitional abilities. In both cases, the authors propose a "uniformity principle" constraining in a parallel fashion both the magnitudes and the operations that agents can use. The authors focus on the definitional bounds. It is not obvious that a theory of definable economies is possible, since there may not be any definable structures that are reasonably close to the classical one. The authors two main conclusions are positive: In many interesting cases mathematical structures do exist with definability-bounded agents. Furthermore, many classical theorems of economic theory survive in a definable context.

PD December 1996. **TI** *Definable Utility in O-Minimal Structures.* AU Richter, Marcel K.; Wong, Kam-Chau. AA Richter: University of Minnesota. Wong: Chinese University of Hong Kong. **SR** University of Minnesota Center for Economic Research Discussion Paper: 296; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 13. **PR** no charge. **JE** D11.

KW Definability. O Minimality. Utility Representation. Bounded Rationality. Separability.

AB Representing binary ordering relations by numerical functions is a basic problem of the theory of measurement. It has applications in many fields of science, and arises in psychology and economics as the problem of establishing utility functions for preference relations. The authors obtain definable utility representations for (both continuous and upper semicontinuous) definable preferences in o-minimal expansions of real closed ordered fields. Such preferences have particular significance for modeling "bounded rationality". The authors prove that there are geometric theorems for definable sets, and provide new alternatives to the classical tools of separability and metric-completeness. The initial application of these ideas in economics was made by Blume and Zame (1992). This paper's results extend their Theorem 1 in several directions.

PD December 1996. **TI** *Bounded Rationalities and Computable Economies.* AU Richter, Marcel K.; Wong, Kam-Chau. AA Richter: University of Minnesota. Wong: Chinese University of Hong Kong. **SR** University of Minnesota Center for Economic Research Discussion Paper: 297; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 80. **PR** no charge. **JE** C63, D11, D51. **KW** Bounded Rationality. Computability. Consumer Theory. General Equilibrium. Recursive Analysis.

AB This paper studies economic equilibrium theory with a "uniformity principle" constraining the magnitudes (prices, quantities, etc.) and the operations (to perceive, evaluate, choose, communicate, etc.) that agents can use. For the special case of computability constraints, all prices, quantities, preference relations, utility functions and demand functions are required to be computable by finite algorithms. Then we obtain sharper versions of several traditional assertions on utility representation, existence of consumer demand functions, the fundamental welfare theorems, characterizations of market excess demands, and others. These positive results hold despite the fact that commodity and price spaces are no longer topologically complete. On the other hand, we give "computable counterexamples" to several traditional assertions, including the existence of a competitive equilibrium. The results can be interpreted as possibility and impossibility results in both computability-bounded rationality and in computational economics.

PD December 1996. **TI** *Computability of Preference, Utility, and Demand.* AU Richter, Marcel K.; Wong, Kam-Chau. AA Richter: University of Minnesota. Wong: Chinese University of Hong Kong. **SR** University of Minnesota Center for Economic Research Discussion Paper: 298; Department of Economics, 1035 Management and Economics, University of Minnesota, 271 19th Avenue South, Minneapolis, MN 55455. **PG** 35. **PR** no charge. **JE** C63, D11. **KW** Bounded Rationality. Consumer Theory. Convex Optimization. Revealed Preference. Recursive Analysis.

AB This paper studies consumer theory from the bounded rationality approach proposed in Richter and Wong (1996a), with a "uniformity principle" constraining the magnitudes (prices, quantities, etc.) and the operations (to perceive, evaluate, choose, communicate, etc.) that agents can use. In particular, we operate in a common computability framework, where commodity quantities, prices, consumer preferences, utility functions, and demand functions are computable by

finite algorithms (Richter and Wong (1996a)). We obtain a computable utility representation theorem. We prove an existence theorem for computable maximizers of quasiconcave utility functions (preferences), and prove the computability of the demand functions generated by such functions (preferences). We also provide a revealed preference characterization of computable rationality for the finite case. Beyond consumer theory, the results have applications in general equilibrium theory (Richter and Wong (1996a)).

Riphahn, Regina T.

PD January 1997. **TI** Applications to the US Disability Program: A Semiparametric Approach. **AU** Riphahn, Regina T.; Kreider, Brent. **AA** Riphahn: University of Munich. Kreider: University of Virginia. **SR** Centre for Economic Policy Research Discussion Paper: 1559; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 44. **PR** 4 pounds or \$8.00. **JE** H55, J26. **KW** Disability System. Retirement Behavior. Discrete Factor. Social Security.

AB This study investigates the determinants of applications for U.S. disability benefits between 1986 and 1993 using a semiparametric discrete factor procedure. Approximating a dynamic optimization model, the estimation carefully accounts for a variety of potential biases that were not addressed in previous studies. Our results indicate vast differences in the responses of men and women to variations in policy measures. Past labor earnings and fringe benefits as well as benefit eligibility and benefit amounts clearly affect application behavior.

Rivkin, Steven G.

TI Understanding the 20th Century Growth in U.S. School Spending. **AU** Hanushek, Eric A.; Rivkin, Steven G.

TI Aggregation and the Estimated Effects of School Resources. **AU** Hanushek, Eric A.; Rivkin, Steven G.; Taylor, Lori L.

Roberts, Joanne

TI Riding Free on the Signals of Others. **AU** Alexander-Cook, Kim; Bernhardt, Dan; Roberts, Joanne.

Rodriguez, Mora Jose V.

TI Employment Turnover and Unemployment Insurance. **AU** Hassler, John; Rodriguez, Mora Jose V.

Rodrik, Dani

PD April 1996. **TI** Why Do More Open Economies Have Bigger Governments? **AA** Columbia University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5537; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 26. **PR** \$5.00. **JE** E62, F15, H11. **KW** External Risk. Openness. Government Consumption.

AB This paper demonstrates that there is a robust empirical association between the extent to which an economy is exposed to trade and the size of its government sector. This association holds for a large cross-section of countries, in low- as well as high-income samples, and is robust to the inclusion of a wide range of controls. The explanation appears to be that government consumption plays a risk-reducing role in

economies exposed to a significant amount of external risk. When openness is interacted with explicit measures of external risk, such as terms-of-trade uncertainty and product concentration of exports, it is the interaction terms that enter significantly, and the openness term loses its significance (or turns negative). The paper also demonstrates that government consumption is the "safe" activity, in the empirically relevant sense, in the vast majority of countries.

PD March 1997. **TI** TFPG Controversies, Institutions, and Economic Performance in East Asia. **AA** Harvard University. **SR** Centre for Economic Policy Research Discussion Paper: 1587; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 48. **PR** 4 pounds or \$8.00. **JE** F43, O30, O47, O53. **KW** Growth. East Asia. Institutions.

AB The controversy over the appropriate partitioning of East Asian growth into accumulation versus technical change has overlooked a fundamental indeterminacy in measurement. As a result, we cannot rule out the possibility that East Asia has in fact experienced a tremendous amount of technological progress of the labor-saving kind. Second, an index of institutional quality (drawn from work by Knack and Keefer (1995) and Easterly and Levine (1996)) does exceptionally well in rank-ordering East Asian countries according to their growth performance. A parsimonious specification containing only initial income, initial education, and institutional quality accounts for virtually all of the variation in the growth performance in the region, even when institutional quality is instrumented. Finally, the experience of Hong Kong, which has had a flat investment ratio since the 1960's, is consistent with the idea that making the transition from a low-investment economy to a high-investment economy requires a hands-on government.

Roland, Gerard

TI Pareto-Improving Economic Reforms through Dual-Track Liberalization. **AU** Qian, Yingyi; Roland, Gerard; Lau, Lawrence J.

PD May 1997. **TI** Transition and the Output Fall. **AU** Roland, Gerard; Verdier, Thierry. **AA** Roland: Universite Libre de Bruxelles. Verdier: DELTA, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 1636; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 18. **PR** 4 pounds or \$8.00. **JE** D21, D50, E30, E61, P41, P51. **KW** Transition. Output Fall. Asset Specificity. Search.

AB This paper presents a model that explains why in the transition economies of Central and Eastern Europe an important output fall has been associated with price liberalization. Its key ingredients are search frictions and Williamsonian relation-specific investment implying that new investments are made only after a new long-term partner has been found. When all firms search for new partners, output may fall because of three effects: a) disruption of previous production links; b) a fall in investment; and c) capital depreciation due to the absence of replacement investment. We show that forms of gradual liberalization like the Chinese "dual-track" price liberalization may avoid or reduce the transitory output fall.

Roldos, Jorge E.

TI Are Business Cycles Different in Asia and Latin America? **AU** Hoffmaister, Alexander W.; Roldos, Jorge E.

TI Macroeconomic Fluctuations in Sub-Saharan Africa. **AU** Hoffmaister, Alexander W.; Roldos, Jorge E.; Wickham, Peter.

Romer, Christina D.

PD May 1996. **TI** Institutions for Monetary Stability. **AU** Romer, Christina D.; Romer, David H. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5557; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** E42, E52. **KW** Monetary Stability. Monetary Policy. Dynamic Inconsistency.

AB This paper demonstrates that failures in monetary policy arise not just from dynamic inconsistency, but more importantly, from imperfect understanding of the economy and the effects of policy. Using recent and historic episodes from the United States and abroad, we show that limited knowledge on the part of economists, policymakers, elected leaders, and voters has been an important source of monetary policy mistakes. We then analyze what institutions of monetary policy could address the problems of both dynamic inconsistency and limited knowledge. Our analysis suggests that one set of institutions that could do this is a highly independent central bank with discretion about both the goals and the conduct of policy, combined with a two-level structure where elected leaders appoint a board of trustees for the central bank, which in turn selects the actual policymakers. We conclude by discussing recent and proposed reforms in monetary policy and institutions in industrialized countries in light of this analysis.

PD May 1996. **TI** Inflation and the Growth Rate of Output. **AA** University of California, Berkeley and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5575; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 74. **PR** \$5.00. **JE** E31, O47. **KW** Inflation. Output Growth.

AB This paper shows that inflation has depended strongly on the growth rate of output for most of the twentieth century. Only in recent years has the deviation of output from trend become the predominant determinant of price behavior. The paper also shows that the growth rate effect works primarily through materials prices, and that the declining importance of materials can explain why the growth rate effect has weakened over time. Finally, the paper shows that the growth rate effect can explain why prices rose in the mid- and late-1930's despite the fact that output was substantially below trend.

Romer, David H.

TI Institutions for Monetary Stability. **AU** Romer, Christina D.; Romer, David H.

Rose, Andrew K.

PD May 1997. **TI** Putting Things in Order: Patterns of Trade Dynamics and Macroeconomics. **AU** Rose, Andrew K.; Feenstra, Robert C. **AA** Rose: University of California, Berkeley. Feenstra: University of California, Davis. **SR** Centre for Economic Policy Research Discussion Paper:

1629; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 28. **PR** 4 pounds or \$8.00. **JE** F10. **KW** Disaggregated Data. Bilateral Trade. Semi-Parametric Methodology. Rank Order. Product Cycle.

AB This paper develops a procedure to rank-order countries and commodities using dis-aggregated American imports data. It finds strong evidence that both countries and commodities can be ranked, consistent with the "product cycle" hypothesis. Countries habitually begin to export goods to the United States according to an ordering; goods are also exported in order. We estimate these orderings using a semi-parametric methodology which takes account of the fact that most goods are not exported by most countries in the sample. The orderings seem sensible, robust and intuitive. For instance, the country rankings derived from dis-aggregated trade data, turn out to be highly correlated with macroeconomic phenomena such as national productivity levels and growth rates.

Rosenberg, Mark

TI Standard Mortality Ratios in Capitation Funding Models: Empirical Issues From Canadian Data. **AU** Bedard, Kelly; Dorland, John; Gregory, Allan W.; Rosenberg, Mark.

Rotte, Ralph

TI South-North Refugee Migration: Lessons for Development Cooperation. **AU** Zimmermann, Klaus F.; Rotte, Ralph; Vogler, Michael.

Rowthorn, Robert

PD April 1997. **TI** Deindustrialization: Causes and Implications. **AU** Rowthorn, Robert; Ramaswamy, Ramana. **AA** Rowthorn: Cambridge University. Ramaswamy: International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/42; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 22. **PR** not available. **JE** F10, F43, J20, O14, O33. **KW** Deindustrialization. North South Trade. Labor Markets. Employment. Manufacturing.

AB All advanced economies have experienced a secular decline in the share of manufacturing employment, which is referred to as deindustrialization. This paper argues that, contrary to popular perceptions, deindustrialization is not a negative phenomenon, but is the natural consequence of the industrial dynamism in an already developed economy, and that North-South trade has had very little to do with deindustrialization. The paper also discusses the implications of deindustrialization for the growth prospects and the nature of labor market arrangements in the advanced economies.

Roy, Suddhasatwa

TI Implementing Market Access. **AU** Krishna, Kala; Roy, Suddhasatwa; Thursby, Marie.

Ruhm, Christopher J.

PD May 1996. **TI** Are Recessions Good for Your Health? **AA** University of North Carolina Greensboro and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5570; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 28. **PR** \$5.00. **JE** E32, I12. **KW** Recessions. Health. Job Holding.

AB This study examines the relationship between economic

conditions and health. Fixed-effect models are estimated using state level data for the 1972-1991 time period. Health is proxied by total and age-specific mortality rates, as well as by 10 particular causes of death. Total mortality and nine of the ten sources of fatalities exhibit a procyclical variation, with suicides representing the important exception. The fluctuations in mortality are larger for 20-44 year olds than for older individuals. The predicted relationship between personal incomes and health is quite weak and is sensitive to the choice of model specifications, time periods and dependent variables. These findings suggest the possible importance of cyclical variations in the time costs of medical care or healthy lifestyles and of negative health effects of job-holding.

TI Trade Sensitivity, Technology, and Labor Displacement.
AU Addison, John; Fox, Douglas; Ruhm, Christopher J.

Rupert, Peter

TI On the Political Economy of Income Distribution and Crime. **AU** Imrohorglu, Ayse; Merlo, Antonio; Rupert, Peter.

Saa-Requejo, Jesus

TI Beyond Arbitrage: "Good-Deal" Asset Price Bounds in Incomplete Markets. **AU** Cochrane, John H.; Saa-Requejo, Jesus.

Sabelhaus, John

TI Understanding the Postwar Decline in U.S. Saving: A Cohort Analysis. **AU** Gokhale, Jagadeesh; Kotlikoff, Laurence J.; Sabelhaus, John.

Sacheti, Sandeep

TI Common Ground Between Free-Traders and Environmentalists. **AU** Karp, Larry; Sacheti, Sandeep; Zhao, Jinhua.

Sachs, Jeffrey

PD May 1996. **TI** The Mexican Peso Crisis: Sudden Death or Death Foretold? **AU** Sachs, Jeffrey; Tornell, Aaron; Velasco, Andres. **AA** Sachs and Tornell: Harvard University and National Bureau of Economic Research. Velasco: New York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5563; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 25. **PR** \$5.00. **JE** F31, F32, O23. **KW** Peso Crisis. Imperfect Credibility.
AB We argue that allowing for the possibility of a self-fulfilling panic helps in understanding several features of the recent Mexican crisis. Self-fulfilling expectations became decisive in generating a panic only after the government ran down gross revenues and ran up short-term dollar debt. We present a simple model to explain how and why multiple equilibria can occur for some levels of reserves or debt, but not for others. Lastly, we argue that the imperfect credibility of Mexican exchange rate policy made it advisable to follow more contractionary fiscal and monetary policies in 1994. Our model formalizes the reasons why this is so.

PD May 1996. **TI** Financial Crises in Emerging Markets: The Lessons from 1995. **AU** Sachs, Jeffrey; Tornell, Aaron; Velasco, Andres. **AA** Sachs and Tornell: Harvard University and National Bureau of Economic Research. Velasco: New

York University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5576; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 44. **PR** \$5.00. **JE** F30, O19. **KW** Financial Crises. Peso Devaluation. Emerging Markets.

AB In this paper we examine closely the financial events following the Mexican peso devaluation to uncover new lessons about the nature of financial crises. We explore the question of why, during 1995, some emerging markets were hit by financial crises while others were not. To this end, we ask whether there are some fundamentals that help explain the variation in financial crises across countries or whether the variation just reflects contagion. We present a simple model identifying three factors that determine whether a country is more vulnerable to suffer a financial crisis: a high real exchange rate appreciation, a recent lending boom, and low reserves. We find that for a set of 20 emerging markets, differences in these fundamentals go far in explaining why during the 1995 some emerging markets were hit by financial crises while others were not. We also find that alternative hypotheses that have been put forth to explain such crises often do not seem to be supported by the data, such as high current account deficits, excessive capital inflows and loose fiscal policies.

Sadka, Efraim

TI Tax Principles and Capital Inflows: Is It Efficient to Tax Nonresident Income? **AU** Razin, Assaf; Sadka, Efraim; Yuen, Chi-Wa.

TI Tax Burden and Migration: A Political Economy Perspective. **AU** Razin, Assaf; Sadka, Efraim.

Saint-Paul, Gilles

PD February 1997. **TI** The Rise and Persistence of Rigidities. **AA** DELTA, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 1571; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 28. **PR** 4 pounds or \$8.00. **JE** E24, E60, J30, J60. **KW** Unemployment. Rigidities. Employment Protection. Political Economy. European Labor.
AB In this paper we argue that employment protection legislation is more likely to arise when the rents earned by the employed over their alternative wage is greater. The model explains why economies with greater real wage rigidity also have greater employment protection. The model also predicts that lower turnover increases the political support for employment protection and that this political support is greater when employment protection is more harmful for employment. Also, rigidities are persistent as they create a constituency of low-productivity sectors whose workers would oppose the removal of firing costs, even though existing rents would not generate support for introducing them. We argue that tight labor markets due to post-war reconstruction needs in Europe made it easier for insiders to create such rents, which in turn led them to support employment protection legislation. In the late 1970's, rents started to fall but reforms proved difficult because of ratchet effects.

PD March 1997. **TI** Economic Integration, Factor Mobility and Wage Convergence. **AA** DELTA, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 1597; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom.

PG 36. **PR** 4 pounds or \$8.00. **JE** E24, J30, J50, J61. **KW** Unemployment. Regional Integration. Unions. Migration. Human Capital. Wage Setting.

AB This paper studies the effect of economic integration of two regions on the mobility of skilled and unskilled workers across regions and on the resulting location of industrial activity. In particular, it studies what happens when wages in both regions are set by the unions of the "West" -- the region with a greater initial relative stock of human capital. We show that in some circumstances, it is in the interest of the West's unions to set a speed of wage convergence greater than equilibrium, thereby generating unemployment in the "East." This slows the migration of human capital towards the East, but quickens the migration of raw labor towards the West. A greater share of economic activity is eventually located in the western region. Unions in the West will benefit from this, provided human capital has low migration costs relative to raw labor.

PD May 1997. **TI** Business Cycles and Long-Run Growth. **AA** DELTA, Paris. **SR** Centre for Economic Policy Research Discussion Paper: 1642; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 19. **PR** 4 pounds or \$8.00. **JE** E32, O30, O40. **KW** Business Cycles. Long-Run Growth. Labor Hoarding. Restructuring. Endogenous Growth. **AB** This survey discusses the effect of macroeconomic fluctuations on long-run growth from both a theoretical and empirical perspective. It emphasizes the "opportunity cost" approach, which states that firms will intertemporally substitute productivity-enhancing activities for regular production activity during recessions. It provides aggregate evidence in favor of the opportunity cost approach.

Sakr, Khaled

TI Adjusting to New Realities: MENA, The Uruguay Round, and the EU- Mediterranean Initiative. **AU** Alonso-Gamo, Patricia; Fennell, Susan; Sakr, Khaled.

Sala-i-Martin, Xavier X.

TI Adoption of Financial Technologies: Implications for Money Demand and Monetary Policy. **AU** Mulligan, Casey B.; Sala-i-Martin, Xavier X.

Salant, Stephen

PD October 1995. **TI** Deducing Implications of Fitness Maximization When a Tradeoff Exists Among Alternative Currencies. **AU** Salant, Stephen; Kalat, Karen L.; Wheatcroft, Ana-Maria. **AA** Salant: University of Michigan. Kalat: University of California, Berkeley. Wheatcroft: Morgan Stanley & Co., Inc. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/09; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 42. **PR** \$4.00; payable to the Department of Economics. **JE** A12, D10, D61, Q20. **KW** Economic Efficiency. Fitness. Foraging. Hoarding. Optimal Control.

AB While the theory of natural selection posits that those behaviors maximizing reproductive success ("fitness") tend to survive, behavioral ecologists frequently explain observed behaviors as maximizing some "currency" on which fitness depends. A weakness of the approach is that reproductive success often depends on more than one currency and behaviors which augment one currency may reduce another. We explain

how to deduce from the hypothesis of fitness maximization testable predictions. We expound the approach entirely in terms of two biological examples -- a preliminary example involving perennial flower replacement and a more elaborate one involving over-winter hoarding by female mammals.

TI When is the Standard Analysis of Common Property Extraction Under Free Access Correct? A Game-Theoretic Justification for Non Game-Theoretic Analyses. **AU** Brooks, Robin; Controneo, Jill; Murray, Michael; Salant, Stephen.

Samiei, Hossein

TI Does Public Disagreement on Monetary Policy Unsettle the Markets? **AU** Lane, Timothy; Samiei, Hossein.

Samwick, Andrew A.

PD May 1996. **TI** Abandoning the Nest Egg? 401(K) Plans and Inadequate Pension Saving. **AU** Samwick, Andrew A.; Skinner, Jonathan. **AA** Dartmouth College and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5568; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 31. **PR** \$5.00. **JE** E21, J32, J38. **KW** Pension Programs. 401 k . Nest Egg. **AB** There has been rapid growth in "self-directed" pension programs such as the 401(k) plan. Because such plans are voluntary, there is concern that many workers neglecting to contribute will reach retirement with inadequate pension saving. First, we show that people who are eligible for 401(k)'s, do not contribute to them, and have no alternative pension plan make up only 2-4 percent of the workforce. By contrast, nearly 50 percent of workers have no pension coverage at all. Imposing mandatory 3 percent or 5 percent contribution rates will improve retirement prospects among the lowest decile of pension-eligible, but would have small aggregate effects. Finally, restricting 401(k) withdrawals when the worker changes jobs could have a larger impact on retirement pension security.

Santos Silva, Joao M. C.

PD November 1996. **TI** A Score Test for Non-Nested Hypotheses With Applications to Discrete Data Models. **AA** Universidade Tecnica de Lisboa. **SR** University College London Discussion Paper: 96/28; Department of Economics, University College London, Gower Street, London WC1E 6BT, England. **PG** 21. **PR** 4 pounds. **JE** C52. **KW** Non-Nested Hypothesis. Score Test. Cox Test. Linear Mixture. Specification Test.

AB This paper suggests that a convenient score test against non-nested alternatives can be constructed from the linear combination of the likelihood functions of the competing models. It is shown that this procedure is essentially a test for the correct specification of the conditional distribution of the variable of interest. Since it is often necessary to fully specify the conditional distribution of the variable of interest in models for discrete data, the test proposed here is particularly attractive in this context. The usefulness of the proposed tests is illustrated with applications to discrete choice and count data models.

Sapir, Andre

PD February 1997. **TI** Domino Effects in Western European Trade, 1960-92. **AA** Universite Libre de Bruxelles.

SR Centre for Economic Policy Research Discussion Paper: 1576; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 24. **PR** 4 pounds or \$8.00. **JE** F13, F15. **KW** Gravity Model. Preferential Trading.

AB This paper uses a standard gravity equation to test the hypothesis of domino effects in Western Europe. The question being addressed is whether increased integration within the EC has impacted negatively on non-members and thereby prompted their application for EC membership. The paper finds that the EC's Internal Market policy may have caused such an effect on EFTA member countries.

Sarel, Michael

PD August 1997. **TI** Growth and Productivity in ASEAN Countries. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/97; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 34. **PR** not available. **JE** D24, E25, O47, O53. **KW** Growth. Factor Productivity. ASEAN.

AB This study examines the nature of the growth process in the ASEAN countries, and particularly whether it has been generated primarily by more inputs or by productivity gains. It uses internationally comparable data and explores an alternative method for estimating the capital and labor factor shares. The results, contradicting some previous studies, indicate a very impressive growth rate of TFP in Singapore, Thailand, and Malaysia, a relatively strong rate for Indonesia, and a negative rate for the Philippines. This study argues that the results of previous studies were driven mainly by the fact that they relied on national accounts data for measures of various variables and, in particular, the factor income shares of capital and labor.

Satchell, Stephen E.

TI An Extended Family of Financial Risk Measures. **AU** Pedersen, Christian S.; Satchell, Stephen E.

Sato, Motohiro

TI Ex ante Free Mobility, Ex post Immobility, and Time-Consistent Policy in a Federal System. **AU** Mitsui, Kiyoshi; Sato, Motohiro.

TI Subsidies Versus Public Provision of Private Goods as Instruments for Redistribution. **AU** Boadway, Robin; Marchand, Maurice; Sato, Motohiro.

PD January 1997. **TI** A Second Best Theory of a Fiscal Federal System. **AA** Queen's University and Hitotsubashi University. **SR** Queen's Institute for Economic Research Discussion Paper: 943; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario, K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 23. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** E62, H23, H70. **KW** Tax Externality. MCPF's. Matching Grants. Fiscal Gap.

AB This paper investigates properties of the second best allocation in a fiscal federal system in which both federal tax and intergovernmental grants are involved and the taxation is distortionary. In contrast to the outcomes in existing works, the authors find; (i) the second best does not require the equalization of the MCPF's between regions; (ii) to replicate the second best, matching grants based on either the local tax rates or tax revenues should be introduced to internalize the tax

externality; and (iii) federal tax policy is redundant once the intergovernmental grants are optimized. The irrelevancy of the federal tax implies that the optimal fiscal gap is indeterminate. Therefore, it will be argued that the standard framework of the fiscal federal model in the literature does not provide a rationale for either decentralization or centralization of the tax system once the federal government is allowed to use sufficient instruments of inter-regional transfers.

TI An Agency Model of Welfare and Disability Assistance. **AU** Boadway, Robin; Marceau, Nicolas; Sato, Motohiro.

Schinasi, Garry J.

TI European Monetary Union and International Capital Markets: Structural Implications and Risks. **AU** Prati, Alessandro; Schinasi, Garry J.

Schmidt, Klaus M.

PD May 1997. **TI** Sequential Investments and Options to Own. **AU** Schmidt, Klaus M.; Noldeke, Georg. **AA** Schmidt: University of Munich. Noldeke: Universitat Basel. **SR** Centre for Economic Policy Research Discussion Paper: 1645; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 24. **PR** 4 pounds or \$8.00. **JE** D23, G32, L22. **KW** Options. Convertible Securities. Property Rights. Incomplete Contracts.

AB This paper analyzes the investment incentives given by contingent ownership structures that are prevalent in joint ventures. We consider a variation of the standard hold-up problem where two parties make relationship-specific investments sequentially in order to generate a joint surplus in the future. In many interesting cases, including investments in human and in physical capital, the following ownership structure implements first-best investments: one party owns the firm initially, while the other party has the option to buy the firm at a set price at a later date. This result is robust to the possibility of renegotiation and uncertainty.

Schneider, Robert

TI The Determinants and Impact of Property Rights: Land Titles on the Brazilian Frontier. **AU** Alston, Lee J.; Libecap, Gary D.; Schneider, Robert.

Schnitzer, Monika

PD March 1997. **TI** Debt vs. Foreign Direct Investment: The Impact of Sovereign Risk on the Structure of International Capital Flows. **AA** University of Munich. **SR** Centre for Economic Policy Research Discussion Paper: 1608; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 31. **PR** 4 pounds or \$8.00. **JE** F20, F34, L14, O12. **KW** Foreign Direct Investment. Sovereign Risk. International Debt. Joint Ventures.

AB In this paper the two standard forms of international investment in developing countries -- debt and foreign direct investment (FDI) -- are compared from a finance perspective. We show that the sovereign risks associated with debt finance are generally less severe than those accompanying FDI. FDI is chosen only if the foreign investor is more efficient in running the project, if the project is risky and if the foreign investor has a good outside option which deters creeping expropriation. The sovereign risk problem of FDI can be alleviated if the host

country and the foreign investor form a joint venture.

Schoenbaum, Michael

TI Race Differences in Labor Force Attachment and Disability Status. **AU** Bound, John; Schoenbaum, Michael; Waidmann, Timothy.

Schumann, Laurence

TI Discriminatory Dealing with Downstream Competitors: Evidence from the Cellular Industry. **AU** Reiffen, David; Schumann, Laurence; Ward, Machael.

Schwalbach, Joachim

TI Corporate Restructuring, Downsizing and Managerial Compensation. **AU** Grasshoff, Ulrike; Schwalbach, Joachim.

Schwartz, Gerd

TI The Role of Fiscal Policy in Sustainable Stabilization: Evidence from Latin America. **AU** Ter-Minassian, Teresa; Schwartz, Gerd.

Scoones, David

TI Multilevel "General Policy Equilibria": Evidence from the American Unemployment Insurance Tax Ceiling. **AU** Hamermesh, Daniel S.; Scoones, David.

Seghezze, Elena

TI Trade-Induced Investment-Led Growth. **AU** Baldwin, Richard E.; Seghezze, Elena.

Shapiro, Matthew

PD May 1996. **TI** Mismeasurement in the Consumer Price Index: An Evaluation. **AU** Shapiro, Matthew; Wilcox, David. **AA** Shapiro: University of Michigan and National Bureau of Economic Research. Wilcox: Board of Governors of the Federal Reserve System. **SR** National Bureau of Economic Research Working Paper: 5590; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 60. **PR** \$5.00. **JE** E31, E60. **KW** Consumer Price Index. Cost of Living. Mismeasurement.

AB This paper develops a framework for studying measurement problems in the consumer price index and systematically analyzes the available evidence concerning the magnitude of these problems. It concludes that the CPI overstates increases in the cost of living. The evidence suggests that the bias is centered on 1.0 percentage points per year. The estimated bias is presented in terms of a probability distribution rather than a point estimate or range. We estimate that there is a 10 percent chance that the bias is less than 0.6 percentage point and a 10 percent chance that it is greater than 1.5 percentage points per year. The paper presents a prototypical price index for cataract surgery. This price index grows much more slowly than a price index for cataract surgery constructed using the methodology of the CPI. The paper discusses implications of CPI mismeasurement for monetary and fiscal policy as well as for other official statistics.

Shaw, Kathryn

TI The Dynamics of Franchise Contracting: Evidence from Panel Data. **AU** Lafontaine, Francine; Shaw, Kathryn.

Shi, Shouyong

PD September 1995. **TI** A Divisible Search Model of Fiat Money. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 930; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. **PG** 26. **PR** \$3.21 Canada; \$3.50 U.S. and Foreign. **JE** E42, E52, J41. **KW** Fiat Money. Monetary Neutrality. Trading Opportunity. Coincidence of Wants.

AB This paper extends the Kiyotki-Wright search model of fiat money to allow for divisible money and goods. The extension allows the author to examine the standard issues in monetary economics, such as the neutrality and super-neutrality of money, by severing the artificial link in the Kiyotki-Wright model between the money supply and the number of money holders. It is shown that money is neutral, but not super-neutral. Money growth generates a trading opportunity effect: it changes the fraction of different agents in the economy and hence changes the probability with which agents have a successful match. In addition, money growth has a negative effect on the real money balance that is familiar in Walrasian monetary models. The balance of the two effects can imply a positive optimal money growth rate.

Shiller, Robert J.

PD April 1996. **TI** Why Do People Dislike Inflation? **AA** Yale University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5539; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 63. **PR** \$5.00. **JE** E31, P16. **KW** Inflation. Sticky Wages.

AB A questionnaire survey was conducted to explore how people think about inflation, and what real problems they see it as causing. With results from 677 people, comparisons were made among people in the U.S., Germany, and Brazil, between young and old, and between economists and non-economists. Among non-economists in all countries, the largest concerns with inflation appears to be that it lowers people's standard of living. Non-economists appear often to believe in a sort of sticky-wage model, by which wages do not respond to inflationary shocks, shocks which are themselves perceived as caused by certain people or institutions acting badly. This standard of living effect is not the only perceived cost of inflation among non-economists: other perceived costs are tied up with issues of exploitation, political instability, loss of morale, and damage to national prestige. The most striking differences between groups studied were between economists and non-economists. There were also important international and intergenerational differences. The U.S.-Germany differences (on questions not just about information) were usually less strong than the intergenerational differences.

TI A Scorecard for Indexed Government Debt. **AU** Campbell, John; Shiller, Robert J.

Shimer, Robert

TI Efficient Wage Dispersion. **AU** Acemoglu, Daron; Shimer, Robert.

Shin, Richard

TI Do Nonprofit Hospitals Exercise Market Power?

AU Simpson, John David; Shin, Richard.

Shin, Yongcheol

TI Testing for the Existence of a Long-Run Relationship. AU Pesaran, M. Hashem; Shin, Yongcheol; Smith, Richard J.

TI Structural Analysis of Vector Error Correction Models With Exogenous I(1) Variables. AU Pesaran, M. Hashem; Shin, Yongcheol; Smith, Richard J.

TI Generalised Impulse Response Analysis in Linear Multivariate Models. AU Pesaran, M. Hashem; Shin, Yongcheol.

Shleifer, Andrei

PD April 1996. TI A Survey of Corporate Governance. AU Shleifer, Andrei; Vishny, Robert W. AA Shleifer: Harvard University and National Bureau of Economic Research. Vishny: University of Chicago and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5554; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 57. PR \$5.00. JE G30. KW Corporate Governance.

AB This paper surveys research on corporate governance, with special attention to the importance of legal protection of investors and of ownership concentration in corporate governance systems around the world.

Sibert, Anne

PD January 1997. TI Monetary Integration and Economic Convergence. AA Birkbeck College. SR Centre for Economic Policy Research Discussion Paper: 1561; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 32. PR 4 pounds or \$8.00. JE E61, F33, F42. KW Policy Coordination. Economic Integration. Monetary Union.

AB Recent research in contract theory views ownership as a substitute for complete contracts. In this paper this approach is applied to monetary integration. Countries face a coordination problem when conducting monetary policy: negative spillovers ensure uncoordinated policy generates too high inflation. Ex ante, policy-makers can undertake politically costly economic reform. This has a positive spillover because it improves the outcome of the monetary policy game. Ex post, contracting over policy may be possible, however, it is supposed that ex-ante contracting over reform and monetary policy, is not. This paper analyzes when monetary union is a good substitute for this inability to commit.

Silvani, Carlos

PD March 1997. TI Designing a Tax Administration Reform Strategy: Experiences and Guidelines. AU Silvani, Carlos; Baer, Katherine. AA Silvani: Federal Revenue Administration, Argentina. Baer: International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/30; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 32. PR not available. JE E62, H26, H71, H87. KW Taxation. Tax Administration. Tax Evasion. Public Finance.

AB Building on previous FAD work in the tax administration field, this paper defines broad criteria for diagnosing the problems in a country's tax administration and formulating an appropriate reform strategy. To be effective, this strategy should

be based on the size of the tax gap and the country's particular circumstances. This paper discusses some guiding principles which have provided the basis for successful reforms, including: reducing the tax system's complexity, encouraging taxpayers' voluntary compliance, differentiating the treatment of taxpayers by their revenue potential, and ensuring the reform's effective management. Also discussed are specific bottlenecks that hinder the effectiveness of the tax administration's operations.

Simpson, John David

PD November 1996. TI Do Nonprofit Hospitals Exercise Market Power? AU Simpson, John David; Shin, Richard. AA Simpson: Federal Trade Commission. Shin: U.S. Department of Justice. SR Federal Trade Commission Bureau of Economics Working Paper: 214; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Room 3110, Washington, D.C. 20580. PG 22. PR no charge. JE I11, K21, L10, L31, L44. KW Nonprofit. Hospitals. Market Power. Mergers.

AB Several theories of nonprofit hospital behavior predict that nonprofit hospitals behave in the consumers' interest and thus do not exercise market power. If these theories are correct, then antitrust enforcement of hospital mergers should be restricted only to those markets in which a nonprofit hospital cannot offset anticompetitive behavior by for-profit hospitals. In this paper, the authors measure a hospital's market power using two alternative measures. The first is the HHI for a country; the second is the distance from a hospital to its closest competitor. For both measures, we find that nonprofit hospitals set higher prices when they have more market power.

PD January 1998. TI Are Retailing Mergers Anticompetitive? An Event Study Analysis. AU Simpson, John David; Hosken, Daniel. AA Federal Trade Commission. SR Federal Trade Commission Bureau of Economics Working Paper: 216; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Room 3110, Washington, D.C. 20580. Website: bperson@ftc.gov. PG 35. PR no charge. JE L81, L40. KW Mergers. Antitrust. Cheat Study Retailing.

AB We examine the abnormal returns of rival firms to determine whether four retailing mergers that occurred during the late 1980s reduced competition. We use the stock returns of retailer in geographic markets unaffected by the merger to control for the efficiency-signaling effect of the merger. Using this methodology, we find that rival firms experience positive abnormal returns from May Company's 1986 acquisition of Associated Dry Goods and American Stores 1988 acquisition of Lucky Stores. These results offer some evidence that retailing mergers that lead to large increases in concentration in already concentrated markets may lessen competition and lead to higher product market prices.

Singer, M.

TI Enterprise Breakups and Performance During the Transition. AU Lizal, L.; Singer, M.; Svejnar, J.

Skinner, Jonathan

TI Abandoning the Nest Egg? 401(K) Plans and Inadequate Pension Saving. AU Samwick, Andrew A.; Skinner, Jonathan.

Slaughter, Matthew

PD April 1997. **TI** The Effect of Globalization on Wages in the Advanced Economies. **AU** Slaughter, Matthew; Swagel, Phillip. **AA** Slaughter: Dartmouth College. Swagel: World Economic Studies Division. **SR** International Monetary Fund Working Paper: WP/97/43; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 27. **PR** not available. **JE** F02, F21, J23, J31, O33. **KW** Globalization. International Trade. Wages. Capital Mobility. Labor Markets.

AB This paper examines the effect of globalization on labor markets in the advanced economies, focusing particularly on the claim that increased economic integration has widened the gap between the wages of more skilled and less skilled workers. The broad consensus of research is that globalization, both in terms of increased trade as well as increased capital mobility and foreign direct investment, has had only a modest effect on wages. Instead, changes in technology have led to a pervasive shift in demand for labor that has favored skilled workers to the detriment of less skilled workers.

Smith, Anthony A. Jr.

TI A Sequential Game Model of Sports Championship Series: Theory and Estimation. **AU** Ferrall, Christopher; Smith, Anthony A. Jr..

Smith, Howard

PD January 1997. **TI** Competition in Retailing: One Stop Shopping. **AU** Smith, Howard; Hay, Donald. **AA** Oxford University. **SR** Oxford Applied Economics Discussion Paper Series: 189; Institute of Economics and Statistics, University of Oxford, St Cross Building, Manor Road, Oxford OX1 3UL, England. Website: www.economics.ox.ac.uk/. **PG** 46. **PR** 2 pounds. **JE** D12, D43, L11, L22. **KW** Competition. Shopping Centers. Retail. Consumer Choice. Optimal Pricing.

AB Competition between shopping centers, which may take the form of supermarkets, shopping malls or high streets, is explored in a model in which the consumer's choice of center is determined by the utility available from visiting different centers, based on the range of products offered and the price vector. The allocation of consumers to centers is assumed to be characterized by a logit function. This model is then used to analyze, among other things, optimal pricing and product selection, oligopolistic competition between neighboring centers, the competitive advantages of supermarkets, malls and high streets, and the possibility of entry deterrence. Some implications for the conduct of competition policy in retailing are indicated.

Smith, Jeffrey A.

TI What Do Bureaucrats Do? The Effects of Performance Standards and Bureaucratic Preferences on Acceptance Into the JTPA Program. **AU** Heckman, James J.; Smith, Jeffrey A.; Taber, Christopher.

Smith, P. J.

PD December 1996. **TI** Are Weak Patent Rights a Barrier to U.S. Exports? **AA** University of Delaware. **SR** University of Delaware Department of Economics Working Paper: 96/13; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 20. **PR** not available.

JE F13, K33. **KW** Intellectual Property. International Trade. Development. Patent Rights. Exports.

AB Many of the recent agreements to strengthen intellectual property rights have been formulated within the context of international trade policy. This paper addresses this issue by providing empirical evidence on the effects of national patent rights on U.S. exports. The hypothesis is that U.S. exports depend on the strength of patent rights in importing countries; the direction of the relationship depends on the importers level of development and regional market conditions. To assess this hypothesis, bilateral trade equations of both the Helpman-Krugman and Gravity models are estimated using cross section data on the manufacturing exports of U.S. states to foreign destinations in 1992. The findings show that state exports are positively related to patent rights in emerging less developed countries and are negatively related to patent rights in the poorest developing countries and wealthiest developed countries.

Smith, Richard J.

TI Testing for the Existence of a Long-Run Relationship. **AU** Pesaran, M. Hashem; Shin, Yongcheol; Smith, Richard J.

TI Structural Analysis of Vector Error Correction Models With Exogenous I(1) Variables. **AU** Pesaran, M. Hashem; Shin, Yongcheol; Smith, Richard J.

Smith, Tony E.

PD January 1997. **TI** Dual Labour Markets, Urban Unemployment and Multicentric Cities. **AU** Smith, Tony E.; Zenou, Yves. **AA** Smith: University of Pennsylvania. Zenou: Universite Catholique de Louvain. **SR** Centre for Economic Policy Research Discussion Paper: 1566; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 56. **PR** 4 pounds or \$8.00. **JE** J41, R14. **KW** Efficiency Wage. Minimum Wage. Edge City. Location Taxation.

AB In this paper a two-sector model of urban unemployment is developed which focuses on the formation of a secondary sector under conditions in which a demand shock in the primary sector leads to a sharp increase in unemployment. The optimal location in the secondary sector is shown to be at the edge of the city, giving rise to a multicentric urban spatial structure. Within this spatial structure, we establish conditions under which the new labor market equilibrium involves not only a decrease in unemployment, but also an increase in net income for those unemployed. These results are extended to the case in which all unemployment benefits are financed by local taxation of firms. In this context, it is shown that when taxation discourages entry of a secondary sector, there may be profit incentives for the primary sector to subsidize the entry of a secondary sector.

Snell, Andrew

TI Real Interest Rates, Nominal Shocks, and Real Shocks. **AU** Driffill, John; Snell, Andrew.

Snower, Dennis J.

TI Centralized Bargaining, Multi-Tasking, and Work Incentives. **AU** Lindbeck, Assar; Snower, Dennis J.

TI Policy Complementarities: The Case for Fundamental Labour Market Reform. **AU** Coe, David T.; Snower, Dennis J.

Soderlind, Paul

TI New Techniques to Extract Market Expectations from Financial Instruments. **AU** Svensson, Lars E. O.; Soderlind, Paul.

PD March 1997. **TI** Monetary Policy and the Fisher Effect. **AA** University of Stockholm. **SR** Centre for Economic Policy Research Discussion Paper: 1610; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 19. **PR** 4 pounds or \$8.00. **JE** E31, E43, E52. **KW** Monetary Policy. Fisher Effect. Inflation Expectations. Interest Rates. Kalman Filter.

AB Historical estimates of the Fisher effect and the informational content in the yield curve may not be relevant after a change in monetary policy. This paper uses a small dynamic rational expectations model with staggered price setting to study how central bank preferences (and thereby monetary policy) affect the relation between nominal interest rates, inflation expectations, and real interest rates. The benchmark parameters, including the Federal Reserve Bank's loss function parameters, are estimated by maximum likelihood on quarterly U.S. data. The policy experiments include stronger inflation targeting, more active monetary policy, and a change in commitment technology.

Song, Lina

TI Chinese Peasant Choices: Farming, Rural Industry or Migration. **AU** Knight, John; Song, Lina.

TI Chinese Rural Migrants in Urban Enterprises: Three Perspectives. **AU** Knight, John; Song, Lina; Huaibin, Jia.

Sonmez, Tayfun

PD October 1995. **TI** Strategy-Proofness in Many-to-One Matching Problems. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/01; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 22. **PR** \$4.00; payable to the Department of Economics. **JE** C71, C78, D71, D78. **KW** Matching. College Admissions. Strategy Proofness. Implementation. Core.

AB We search for strategy-proof solutions in the context of (many-to-one) matching problems (Gale and Shapley 1962). In this model, whenever the firms can hire as many workers as they want (the capacities are unlimited) the stable set is a singleton. There exists a Pareto efficient, individually rational, and strategy-proof matching rule if and only if the capacities are unlimited. Furthermore, whenever the capacities are unlimited, the matching rule which selects the unique stable matching is the only matching rule that is Pareto efficient, individually rational, and strategy-proof.

PD October 1995. **TI** Strategy-Proofness and Singleton Cores in Generalized Matching Problems. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/02; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 17. **PR** \$4.00; payable to the Department of Economics. **JE** C71, C78, D71, D78. **KW** Matching. Marriage Problems. Housing Market. Strategy Proofness. Implementation. Core.

AB We introduce and study the class of generalized matching problems. Two subclasses of this class are marriage problems

(Gale and Shapley 1962) and the housing market (Shapley and Scarf 1974). We search for strategy-proof solutions to generalized matching problems. We show that if the core is a singleton and is stable for all problems then it is strategy-proof as a solution. We also show that on the class of problems with a non-empty core there exists a Pareto efficient, individually rational, and strategy-proof solution if the core is a singleton for all problems. Furthermore if such a solution exists, it is the core.

PD October 1995. **TI** Implementation in Generalized Matching Problems. **AA** University of Michigan. **SR** University of Michigan Center for Research on Economic and Social Theory, (CREST) Working Paper: 95/03; Department of Economics, University of Michigan, Ann Arbor, Michigan 48109. **PG** 16. **PR** \$4.00; payable to the Department of Economics. **JE** C71, C78, D71, D78. **KW** Matching. Marriage. Housing Market. Implementation. Core Correspondence.

AB We search for (Nash) implementable solutions on a class of one-to-one matching problems which includes both the housing market (Shapley and Scarf 1974) and marriage problems (Gale and Shapley 1962). We show that the core correspondence is implementable. We furthermore show that any solution that is Pareto efficient, individually rational, and implementable is a supersolution of the core correspondence. That is, the core correspondence is the minimal solution that is Pareto efficient, individually rational, and implementable. A corollary of independent interest in the context of the housing market is that the core correspondence is the only single-valued solution that is Pareto-efficient, individually rational, and implementable.

Sorsa, Piritta

PD May 1997. **TI** The GATS Agreement on Financial Services -- A Modest Start to Multilateral Liberalization. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/55; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 28. **PR** not available. **JE** F13, F36, G15, G28. **KW** Liberalization. GATS. Openness. Financial Services. International Finance.

AB This paper analyzes the links between multilateral and unilateral financial liberalization, the former represented by the General Agreements on Trade in Services (GATS). It provides an overview of the main features of the GATS and what the participants are restricted to in banking and securities within its framework, and compares GATS liberalization with the actual state of liberalization of the participants' financial sectors. The results suggest that in many countries multilaterally liberalized financial sector policies are more restrictive than the actual state of openness or development of financial sectors. Many emerging markets liberalized little under the GATS despite often well-developed financial markets, while the opposite was true in some less developed developing countries.

Spaventa, Luigi

TI Setting Conversion Rates for the Third Stage of EMU. **AU** De Grauwe, Paul; Spaventa, Luigi.

Spicer, John

PD July 1995. **TI** Scab Labor. **AU** Spicer, John; Bernhardt, Dan. **AA** Queen's University. **SR** Queen's Institute for Economic Research Discussion Paper: 925;

Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. PG 12.

PR \$3.21 Canada; \$3.50 U.S. and Foreign. JE J51, J52. KW Strikes. Unions. Bargaining.

AB This paper explores the political economy of unions, and the consequences this has for bargaining and strikes. The authors develop a very simple model to show that there are circumstances in which everyone, including striking workers, gains when some employees cross the picket line. The authors detail how strikes can emerge in equilibrium despite the absence of uncertainty, and how this strike outcome can Pareto dominate the outcome when scabbing is illegal, despite the fact that the strike destroys surplus. They also characterize when the firm might prefer to lock out those workers who would be strike breakers.

PD July 1995. TI Roller Coasting Up and Down the Demand Curve of a Durable Goods Monopolist. AU Spicer, John; Bernhardt, Dan. AA Queen's University. SR Queen's Institute for Economic Research Discussion Paper: 926; Department of Economics, Institute for Economic Research, Queen's University, Kingston, Ontario K7L 3N6, Canada. Website: qed.econ.queensu.ca/pub/paper. PG 11. PR \$3.21 Canada; \$3.50 U.S. and Foreign. JE C70, D42, L12. KW Durable Goods. Monopoly.

AB This paper considers a durable goods monopolist who can commit to prices at each date, total output, and possibly release dates for stock. The monopolist faces a finite number of arbitrarily patient consumers. Surprisingly, if the monopolist can commit only to prices and total output, she earns only those profits that a static monopolist would earn. When the monopolist can also commit to release dates for stock, the authors show how the optimal pricing rule can be characterized by a programming problem. The monopolist sets high prices in odd periods and low prices in even periods, releasing one good in every odd period. Sufficient conditions are determined for the monopolist's total output to exceed that of a static monopolist.

Spilimbergo, Antonio

TI Illegal Immigration, Border Enforcement, and Relative Wages: Evidence from Apprehensions at the U.S.-Mexico Border. AU Hanson, Gordon; Spilimbergo, Antonio.

Spiller, Pablo T.

TI Airline Hubs: Costs, Markups and the Implications of Customer Heterogeneity. AU Berry, Steven; Carnall, Michael; Spiller, Pablo T.

Staiger, Douglas

TI Roe V. Wade and American Fertility. AU Levine, Phillip; Kane, Thomas; Staiger, Douglas; Zimmerman, David.

Staiger, Robert W.

TI Reciprocal Trade Liberalization. AU Bagwell, Kyle; Staiger, Robert W.

TI Strategic Export Subsidies and Reciprocal Trade Agreements: The Natural Monopoly Case. AU Bagwell, Kyle; Staiger, Robert W.

Stein, Ernesto

TI Budget Institutions and Fiscal Performance in Latin

America. AU Alesina, Alberto; Hausmann, Ricardo; Hommes, Rudolf; Stein, Ernesto.

Stein, Jeremy C.

PD March 1996. TI Rational Capital Budgeting in an Irrational World. AA Massachusetts Institute of Technology and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5496; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 39. PR \$5.00. JE G12, G31. KW Hurdle Rates. Capital Budgeting. Irrational Markets. Stock Returns.

AB This paper addresses the following basic capital budgeting question: Suppose that cross-sectional differences in stock returns can be predicted based on variables other than beta (e.g., book-to-market), and that this predictability reflects market irrationality rather than compensation for fundamental risk. In this setting, how should companies determine hurdle rates? I show how factors such as managerial time horizons and financial constraints affect the optimal hurdle rate. Under some circumstances, beta can be useful as a capital budgeting tool, even if it is of no use in predicting stock returns.

Stella, Peter

PD July 1997. TI Do Central Banks Need Capital? AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/83; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 36. PR not available. JE E58, M41. KW Central Banks. Recapitalization. Monetary Policy.

AB Central banks may operate perfectly well without capital as conventionally defined. A large negative net worth, however, is likely to compromise central bank independence and interfere with its ability to attain policy objectives. If society values an independent central bank capable of effectively implementing monetary policy, recapitalization may become essential. Proper accounting practice in determining central bank profit or loss and rules governing the transfer of the central bank's operating result to the treasury are also important. A variety of country-specific central bank practices are reviewed to support the argument.

Suarez, Javier

TI Endogenous Cycles in a Stiglitz-Weiss Economy. AU Sussman, Oren.; Suarez, Javier.

Sun, Yan

TI Some Evidence on Exchange Rate Determination in Major Industrial Countries. AU Johnston, R. Barry; Sun, Yan.

Sussman, Oren

PD March 1997. TI Endogenous Cycles in a Stiglitz-Weiss Economy. AU Sussman, Oren.; Suarez, Javier. AA Sussman: Ben-Gurion University of the Negev. Suarez: CEMFI. SR Centre for Economic Policy Research Discussion Paper: 1604; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 24. PR 4 pounds or \$8.00. JE D82, E32, E51. KW Credit Rationing. Endogenous Cycles.

AB The literature on financial imperfections and business cycles has focused on propagation mechanisms. In this paper we model a pure reversion mechanism, such that the economy

may converge to a two-period equilibrium cycle. This mechanism confirms that financial imperfections may have a dramatic amplification effect. Unlike some related models, contracts are complete. Indexation is not assumed away. The welfare properties of a possible stabilizing policy are analyzed. The model itself is a dynamic extension of the well-known Stiglitz-Weiss model of lending under moral hazard. Although stylized, the model still captures some important features of credit cycles.

Svejnár, J.

TI Enterprise Breakups and Performance During the Transition. **AU** Lizal, L.; Singer, M.; Svejnár, J.

Svensson, Lars E. O.

PD January 1997. **TI** New Techniques to Extract Market Expectations from Financial Instruments. **AU** Svensson, Lars E. O.; Soderlind, Paul. **AA** Svensson: Stockholm University. Soderlind: Stockholm School of Economics. **SR** Centre for Economic Policy Research Discussion Paper: 1556; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 56. **PR** 4 pounds or \$8.00. **JE** E43, E52, G13. **KW** Interest Rates. Exchange Rates. Inflation. Options. Forward Rates. Risk-Neutral Distribution.

AB This paper is a selective survey of new or recent methods to extract information about market expectations from asset prices for monetary policy purposes. Traditionally, interest rates and forward exchange rates have been used to extract expected means of future interest rates, exchange rates and inflation. More recently, these methods have been refined to rely on implied forward interest rates, so as to extract expected future time-paths. Very recently, methods have been designed to extract not only the means, but also the whole (risk neutral) probability distribution from a set of option prices.

Swagel, Phillip

TI The Effect of Globalization on Wages in the Advanced Economies. **AU** Slaughter, Matthew; Swagel, Phillip.

Swenson, Deborah L.

PD March 1996. **TI** Explaining Domestic Content: Evidence from Japanese and U.S. Auto Production in the U.S. **AA** University of California, Davis and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5495; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** F20, L62. **KW** Auto Production. Domestic Content. Elasticity of Substitution. Sourcing.

AB This paper studies the domestic content decisions of auto makers in the U.S. between 1984 and 1993 using foreign trade zone activity as a tool by which one can observe individual sourcing and production. The results show that although the domestic content of Japanese firms is rising, differences are not being eliminated completely. Also, the apparent elasticity of substitution is lower for Japanese than for U.S. firms. These results suggest that although transplant production may reduce the U.S. automotive deficit with Japan, transplant production will not cause its elimination.

Tabellini, Guido

TI Monetary Cohabitation in Europe. **AU** Persson,

Torsten; Tabellini, Guido.

Taber, Christopher

TI What Do Bureaucrats Do? The Effects of Performance Standards and Bureaucratic Preferences on Acceptance Into the JTPA Program. **AU** Heckman, James J.; Smith, Jeffrey A.; Taber, Christopher.

Tan, Ling Hui

TI Transferable Licenses vs. Nontransferable Licenses: What is the Difference? **AU** Krishna, Kala; Tan, Ling Hui.

Tauras, John A.

TI Public Policy and Youth Smokeless Tobacco Use. **AU** Chaloupka, Frank J.; Grossman, Michael; Tauras, John A.

Taylor, Alan M.

TI The Great Depression as a Watershed: International Capital Mobility Over the Long Run. **AU** Obstfeld, Maurice; Taylor, Alan M.

Taylor, Larry W.

TI Diagnostics for IV Regressions. **AU** Pesaran, M. Hashem; Taylor, Larry W.

Taylor, Lori L.

TI Aggregation and the Estimated Effects of School Resources. **AU** Hanushek, Eric A.; Rivkin, Steven G.; Taylor, Lori L.

Ter-Minassian, Teresa

PD August 1997. **TI** The Role of Fiscal Policy in Sustainable Stabilization: Evidence from Latin America. **AU** Ter-Minassian, Teresa; Schwartz, Gerd. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/94; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 17. **PR** not available. **JE** E61, E62, N46. **KW** Fiscal Policy. Stabilization Policies. Latin America. Structural Reforms. Fiscal Reforms.

AB This paper reviews the role of fiscal policy in a number of stabilization programs in Latin America since the early 1980's. The paper highlights the importance of sustainable fiscal adjustment in stabilization efforts, and discusses the main issues that arise in this context. By reviewing the Latin American experience, it is argued that responsibility for failed stabilization attempts can be traced to four main factors: inconsistent policy mixes; excessive reliance on temporary factors of improvement in the fiscal accounts; failure to implement fundamental fiscal reforms; and lack of complementary structural reforms.

Thakor, Anjan V.

TI Can Relationship Banking Survive Competition? **AU** Boot, Arnoud W. A.; Thakor, Anjan V.

Thimann, Christian

TI From Generosity to Sustainability: The Austrian Pension System and Options for its Reform. **AU** Koch, Manfred; Thimann, Christian.

Tholl, William G.

TI Endogenous Work Hours and Practice Patterns of Canadian Physicians. **AU** Ferrall, Christopher; Gregory, Allan W.; Tholl, William G.

Thomas, Alun

TI Labor Market Adjustment in Canada and the United States. **AU** Prasad, Eswar S.; Thomas, Alun.

Thomas, Charles J.

PD December 1996. **TI** Market Structure and the Flow of Information In Repeated Auctions. **AA** Federal Trade Commission. **SR** Federal Trade Commission Bureau of Economics Working Paper: 213; Bureau of Economics, Federal Trade Commission, 6th and Pennsylvania Ave. NW, Room 3110, Washington, D.C. 20580. **PG** 33. **PR** no charge. **JE** D44, D82, L10, L40. **KW** Repeated Auction. Vertical Integration. Bid Revelation. Information Transmission.

AB Modeling situations of vertical integration and its concomitant information flows as the repeated auctions introduced in Thomas [1996a], this paper examines the transmission of private information via the auction outcomes, and shows how that transmission is affected by changes in market structure. The author examines structural information transmission, created through various policies for conducting auctions, and its effect on strategic information transmission, which arises as an optimal response to given structural policies. He initially models information acquisition in situations where bidders do not see rival bids and learn only the identity of the winner. He then extends this model to show how the desire to conceal information about oneself affects behavior by examining repeated auctions with publicly announced bids. Finally, the author shows that a vertical merger between a buyer and a seller can be procompetitive.

Thornton, John

TI World Commodity Prices as a Forecasting Tool for Retail Prices: Evidence From the United Kingdom. **AU** Garcia, Alicia; Thornton, John.

Thugge, Kamau

TI Debt Relief for Low-Income Countries and the HIPC Initiative. **AU** Boote, Anthony R.; Thugge, Kamau.

Thursby, Marie

TI Implementing Market Access. **AU** Krishna, Kala; Roy, Suddhasatwa; Thursby, Marie.

Timmermann, Allan

TI A Recursive Modelling Approach to Predicting. **AU** Pesaran, M. Hashem; Timmermann, Allan.

Titman, Sheridan

TI Pricing Strategy and Financial Policy. **AU** Dasgupta, Sudipto; Titman, Sheridan.

TI Evidence on the Characteristics of Cross Sectional Variation in Stock Returns. **AU** Daniel, Kent; Titman, Sheridan.

Tornell, Aaron

TI Exchange Rate Dynamics and Learning. **AU** Gourinchas, Pierre-Olivier; Tornell, Aaron.

TI The Mexican Peso Crisis: Sudden Death or Death Foretold? **AU** Sachs, Jeffrey; Tornell, Aaron; Velasco, Andres.

TI Financial Crises in Emerging Markets: The Lessons from 1995. **AU** Sachs, Jeffrey; Tornell, Aaron; Velasco, Andres.

Torstensson, Johan

PD January 1997. **TI** Country Size and Comparative Advantage: An Empirical Study. **AA** Lund University. **SR** Centre for Economic Policy Research Discussion Paper: 1554; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 40. **PR** 4 pounds or \$8.00. **JE** F12, F14. **KW** Economic Geography. Trade. Country Size. Comparative Advantage.

AB We formulate a simple model that captures two recent hypotheses: (i) that countries with an abundant absolute endowment of skilled labor will be net exporters in R&D-intensive industries; and (ii) that countries with a large domestic market will be net exporters in scale-intensive industries. The hypotheses are empirically tested by studying the trade of each and every OECD country individually. Thereafter, we pool the data into one regression by introducing, simultaneously, country and industry characteristics. The results offer relatively strong support for hypothesis (i) and some support for hypothesis (ii).

Tournas, Yanni

TI Excess Capacity as an Incentive Device. **AU** Kerschbamer, Rudolf; Tournas, Yanni.

Treichel, Volker

PD March 1997. **TI** Broad Money Demand and Monetary Policy in Tunisia. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/22; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 25. **PR** not available. **JE** C52, E41, E52, E58, N17. **KW** Tunisia. Monetary Policy. Money Demand. Central Banks.

AB The development of empirical foundations to the conduct of monetary policy in Tunisia is the central concern of this paper. Finding stable money demand functions, it broadly corroborates the choice of monetary aggregates as intermediate targets of monetary policy by the Tunisian Central Bank. It finds, however, a lower income elasticity than the one currently applied by the Central Bank and proposes a different methodology for defining monetary growth targets. The paper also finds that both interest rates and reserve money are feasible operating targets and suggests that the Central Bank orients its monetary policy more towards transparent operating targets.

TI Financial Sector Reforms in Algeria, Morocco, and Tunisia: A Preliminary Assessment. **AU** Jbili, Abdelali; Enders, Klaus; Treichel, Volker.

Turtelboom, Bart G.

TI Characteristics of the Euro, the Demand for Reserves, and Policy Coordination Under EMU. **AU** Masson, Paul R.; Turtelboom, Bart G.

Ubide, Angel

TI How Long is the Long Run? A Dynamic Analysis of the Spanish Business Cycle. **AU** Lopez, Humberto; Fabrizio,

Stefania; Ubide, Angel.

Ucer, E. Murat

TI Fiscal Imbalances, Capital Inflows, and the Real Exchange Rate: The Case of Turkey. **AU** Agenor, Pierre-Richard; McDermott, C. John; Ucer, E. Murat.

Uctum, Merih

PD March 1997. **TI** Debt and Deficit Ceilings, and Sustainability of Fiscal Policies: An Intertemporal Analysis. **AU** Uctum, Merih; Wickens, Michael R. **AA** Uctum: City University of New York. Wickens: University of York. **SR** Centre for Economic Policy Research Discussion Paper: 1612; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 20. **PR** 4 pounds or \$8.00. **JE** E60, H60, H87. **KW** Fiscal Policy. Sustainability. Fiscal Criteria. Discount Rate. Forecasts.

AB This paper examines the consequences for the sustainability of fiscal policy of imposing restrictive ceilings on deficits and debt. Our theoretical framework is a generalization of the government intertemporal budget constraint which allows for time-varying interest rates, endogenous primary deficits, a finite planning horizon and future policy shifts. We show how published forecasts can be used and we derive a measure of fiscal pressure suitable for the medium term. We find that fiscal policy is not sustainable for most industrialized countries over an infinite horizon, but is sustainable in the medium term in the absence of ceilings. Imposing ceilings, however, generates unsustainability.

Uhlig, Harald

PD March 1997. **TI** Long-Term Debt and the Political Support of a Monetary Union. **AA** Tilburg University. **SR** Centre for Economic Policy Research Discussion Paper: 1603; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 30. **PR** 4 pounds or \$8.00. **JE** E44, E50, E63, G18, H63. **KW** Monetary Policy. EMU. Political Economy. Debt Management. Redistribution.

AB This paper examines the role of long-term debt in political support for a monetary union or, more generally, an inflation-reduction policy. The central idea is that the decision on membership of the union leads to a redistribution between debtors and creditors, if they are holding long-term debt with a nominally fixed interest rate, as well as taxpayers. For example, if joining the union means a decrease in the inflation rate, creditors should favor joining while debtors should be against it. A government of a high-inflation country might strategically try to exploit this effect by selling more long-term debt denominated in its own currency at a fixed nominal rate rather than a foreign currency such as the dollar (or, almost equivalently, as floating-rate debt or rolled-over short-term debt) to its citizens. We show that the effect on political support is unclear. While the "creditor effect" of increasing the number of agents holding domestically denominated debt helps generate support for joining the union, the "tax effect" of having to raise more taxes in order to pay for the increased real-debt payments after a successful monetary union works in the opposite way.

Urga, Giovanni

TI Convergence in Output in Transition Economies: Central

and Eastern Europe, 1970-1995. **AU** Estrin, Saul; Urga, Giovanni.

Valdes, Rodrigo

TI Capital Flows and the Twin Crises: The Role of Liquidity. **AU** Goldfajn, Ilan; Valdes, Rodrigo.

van der Mensbrugghe, Emmanuel

TI External Borrowing by the Baltics, Russia and Other Countries of the Former Soviet Union: Developments and Policy Issues. **AU** Kapur, Ishan; van der Mensbrugghe, Emmanuel.

Van Reenen, John

TI Quantifying a Dangerous Obsession? Competitiveness and Export Performance in an OECD Panel of Industries. **AU** Carlin, Wendy; Van Reenen, John; Glyn, Andrew.

Van Rijckeghem, Caroline

PD May 1997. **TI** Social Security Tax Reform and Unemployment: A General Equilibrium Analysis for France. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/59; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 20. **PR** not available. **JE** E62, H21, H55, J38, J68. **KW** Tax Policy. Unemployment. Laffer Curve. Wage Curve. France.

AB This paper develops and calibrates a simple general equilibrium model with two types of labor and capital for the French economy. The simulation results indicate that targeted reductions in employer social security taxes have six times as large an effect on employment as untargeted reductions for equal initial budgetary cost, while employee social security tax reductions have a negative effect on employment. They also point to the presence of "self-financing," whereby reductions in various tax rates lead to lower budget deficits in the long run, as a result of an expanding tax base and lower unemployment insurance outlays.

PD June 1997. **TI** Corruption and the Rate of Temptation: Do Low Wages in the Civil Service Cause Corruption? **AU** Van Rijckeghem, Caroline; Weder, Beatrice. **AA** International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/73; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 42. **PR** not available. **JE** J31, J38, J41, J45, O57. **KW** Efficiency Wages. Civil Service. Corruption. Wages. Bribes.

AB This paper develops and tests two efficiency wage models of corruption in the civil service. Under fair wage models, civil service wages are an important determinant of corruption. Under shirking models, the level of wages is of secondary importance, as potential bribes dwarf wage income. The empirical evidence points to a negative relationship between corruption and wages across developing countries. Tests as to the validity of the two different efficiency wage models are inconclusive.

van Wincoop, Eric

TI Trade in Nominal Assets and Net International Capital Flows. **AU** Bacchetta, Philippe; van Wincoop, Eric.

Vandenbussche, Hylke

PD February 1997. **TI** Strategic Behavior Under European Anti-dumping Rules. **AU** Vandenbussche, Hylke; Pauwels, Wilfried; Weverbergh, Marcel. **AA** University of Antwerp. **SR** Centre for Economic Policy Research Discussion Paper: 1565; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 40. **PR** 4 pounds or \$8.00. **JE** C72, F13, K20. **KW** Anti-Dumping. Imperfect Competition. Two-Period Cournot Oligopoly.

AB This paper analyzes how European anti-dumping policy under imperfect competition affects firm behavior and domestic welfare. Our theoretical model is the first to complement the European empirical literature on anti-dumping policy (see Messerlin (1989), Hindley (1988), Tharakan and Waelbroeck (1994)), and can usefully be compared with recent papers dealing with the effects of U.S. anti-dumping policy (Reitzes (1993), Fischer (1992), Prusa (1994)). We use a two-period Cournot duopoly model with a European and a foreign firm that differ in costs and products. European anti-dumping policy differs from its U.S. counterpart mainly in terms of injury margin calculation and the derivation of the anti-dumping duty. European anti-dumping rules provide the home firm with incentives to either induce or to feign injury. Our results indicate that when the level of protection is endogenous, the strategic trade policy argument for protection need not apply. Our findings also suggest that U.S. anti-dumping rules perform better than European rules in terms of welfare and in terms of protecting domestic value added and employment.

Vanhoudt, Patrick

PD January 1997. **TI** Do Labor Market Policies and Growth Fundamentals Matter for Income Inequality in OECD Countries? Some Empirical Evidence. **AA** University of Antwerp and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/03; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 12. **PR** not available. **JE** D30, E62, H30, J24, O40. **KW** Income Distribution. Growth. Labor Markets. Unemployment. Fiscal Policy.

AB Income distribution may be related to fundamentals affecting economic growth and to labor market policies. Noting that inequality is affected by unemployment. This paper presents a model in which labor market policies affect unemployment which in turn affects inequality. The model also includes the effects of changes in per capita income on inequality through the accumulation of physical capital and technological know-how. When a resulting reduced-form relationship is estimated, its explanatory power is surprisingly high: on average, it explains about three quarters of the variation in inequality measures for the OECD countries, and Granger Causality tests confirm the model's predictions.

Vassalou, Maria

TI Portfolio Selection and Asset Pricing With Dynamically Incomplete Markets and Time-Varying First and Second Moments. **AU** Nielsen, Lars Tyge; Vassalou, Maria.

Velasco, Andres

TI The Mexican Peso Crisis: Sudden Death or Death Foretold? **AU** Sachs, Jeffrey; Tornell, Aaron; Velasco, Andres.

TI Financial Crises in Emerging Markets: The Lessons from 1995. **AU** Sachs, Jeffrey; Tornell, Aaron; Velasco, Andres.

Velazquez, Francisco J.

TI The Determining Factors of Foreign Direct Investment in Spain and the Rest of the OECD: Lessons for CEECs. **AU** Martin, Carmela; Velazquez, Francisco J.

Venables, Anthony J.

TI Multinational Production, Skilled Labor, and Real Wages. **AU** Markusen, James R.; Venables, Anthony J.

TI The Theory of Endowment, Intra-Industry, and Multinational Trade. **AU** Markusen, James R.; Venables, Anthony J.

Venti, Steven

TI Personal Retirement Saving Programs and Asset Accumulation: Reconciling the Evidence. **AU** Poterba, James M.; Venti, Steven; Wise, David.

PD June 1996. **TI** The Wealth of Cohorts: Retirement Saving and the Changing Assets of Older Americans. **AU** Venti, Steven; Wise, David. **AA** Venti: Dartmouth College and National Bureau of Economic Research. Wise: Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5609; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 29. **PR** \$5.00. **JE** E21, G23, J26. **KW** Retirement Saving. Personal Saving. Wealth. Financial Assets. Pension Plans.

AB Personal retirement accounts are becoming an increasingly important form of retirement saving. Using data from the Survey of Income and Program Participation, the paper considers the effect of this change on the assets of recent retirees and persons who are approaching retirement. Much of the analysis is based on comparisons of younger and older cohorts with different lengths of exposure to personal retirement saving programs. The findings suggest that personal retirement saving has already added substantially to the personal financial assets of older families. Projections imply that the personal financial assets of the cohort that will attain age 76 in 28 years will be almost twice as large as the personal financial assets of the cohort that attained age 76 in 1991. The results indicate also that to date there has been little replacement of employer-provided pension saving with personal retirement saving.

Verdier, Thierry

TI Transition and the Output Fall. **AU** Roland, Gerard; Verdier, Thierry.

Vishny, Robert W.

TI A Survey of Corporate Governance. **AU** Shleifer, Andrei; Vishny, Robert W.

Vocke, Matthias

PD May 1997. **TI** Investment Implications of Selected WTO Agreements and the Proposed Multilateral Agreement on Investment. **AA** University of St. Gallen, Switzerland and International Monetary Fund. **SR** International Monetary Fund Working Paper: WP/97/60; International Monetary Fund, 700 19th Street, Washington, DC 20431. **PG** 29. **PR** not

available. **JE** F21, F33, F42, K33, O19. **KW** Foreign Investment. Trade Liberalization. World Trade Organization. Policy Coordination.

AB The substantial increase in foreign direct investment (FDI) in recent years has triggered a discussion of a uniform treatment of investment in international law. Most contributions to the multilateral investment framework derive from the World Trade Organization (WTO) agreements on trade liberalization. The resulting framework is incomplete, as the WTO agreements restrict their focus on investment to aspects related to international trade and often apply to selected sectors only. A broader investment regime is needed to provide a more neutral incentive framework for investment liberalization and to promote efficient international investment flows.

Vogler, Michael

TI South-North Refugee Migration: Lessons for Development Cooperation. **AU** Zimmermann, Klaus F.; Rotte, Ralph; Vogler, Michael.

von Hagen, Jurgen

TI Fiscal Policy and Monetary Union: Is There a Tradeoff Between Federalism and Budgetary Restrictions? **AU** Eichengreen, Barry; von Hagen, Jurgen.

PD January 1997. **TI** Electoral Institutions, Cabinet Negotiations, and Budget Deficits within the European Union. **AU** von Hagen, Jurgen; Hallerberg, Mark. **AA** von Hagen: Universitat Bonn. Hallerberg: Georgia Institute of Technology. **SR** Centre for Economic Policy Research Discussion Paper: 1555; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 40. **PR** 4 pounds or \$8.00. **JE** H61, H62, K40. **KW** Government Budgeting. Public Debt. Deficits. Electoral Systems. Political Economy.

AB Two literatures in political economy argue that differences in political institutions help explain variation in the fiscal performance of countries. They identify electoral systems and institutions that structure the formation of the budget as important determinants of the budget deficit. In this paper we indicate that these two arguments complement one another. Electoral institutions matter because they restrict the type of budgetary institution a state has at its disposal to solve the coordination problem involved in the budget negotiations. The theory and the empirical results indicate a strong relationship between one-party governments and strong finance minister solutions on the one hand, and multi-party or minority governments and the use of formal budget targets on the other. Pooled time series regression supports our contention that the presence of one of these budgetary institutions matters more than the plurality/proportional representations dichotomy.

PD March 1997. **TI** Sequencing and the Size of the Budget: A Reconsideration. **AU** von Hagen, Jurgen; Hallerberg, Mark. **AA** von Hagen: Universitat Bonn. Hallerberg: Georgia Institute of Technology. **SR** Centre for Economic Policy Research Discussion Paper: 1589; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 44. **PR** 4 pounds or \$8.00. **JE** D71, H61, H62. **KW** Government Budget. Public Finance. Coordination Games.

AB Conventional wisdom argues that spending levels and, by extension, budget deficits will be higher for governments using bottom-up instead of top-down methods of budgeting. Ferejohn

and Krehbiel (1987) appear to debunk this argument. They indicate that the superiority of one method over the other in lowering the size of the budget depends on the distribution of the spending preferences of the policy-makers. These authors do not consider two problems that top-down budgeting is intended to solve: policy-makers who value a large budget as a goal in itself; and policy-makers who do not consider fully the cost of the spending programs they support, which leads to the "common pool problem." We add such players to a framework meant to parallel Ferejohn and Krehbiel's model. We find that, contrary to conventional wisdom, bottom-up produces smaller budgets than top-down if players seek to maximize dimensions of spending relevant to their constituents and if their ideal budgets are close to one another. At the same time, the order of the vote per se does not reduce the size of the budget when there exists a common pool problem. The second part of this paper provides a reinterpretation of the U.S. budgeting experience in the post-war era based on this insight.

Waidmann, Timothy

TI Race Differences in Labor Force Attachment and Disability Status. **AU** Bound, John; Schoenbaum, Michael; Waidmann, Timothy.

Waldfoegel, Joel

TI Free Entry and Social Inefficiency in Radio Broadcasting. **AU** Berry, Steven; Waldfoegel, Joel.

Waldron, Patrick

TI Optimal Determination of Bookmakers' Betting Odds: Theory and Tests. **AU** Fingleton, John; Waldron, Patrick.

Ward, Machael

TI Discriminatory Dealing with Downstream Competitors: Evidence from the Cellular Industry. **AU** Reiffen, David; Schumann, Laurence; Ward, Machael.

Weder, Beatrice

TI Corruption and the Rate of Temptation: Do Low Wages in the Civil Service Cause Corruption? **AU** Van Rijckeghem, Caroline; Weder, Beatrice.

Wei, Shang-Jin

PD April 1996. **TI** Intra-National versus International Trade: How Stubborn are Nations in Global Integration? **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5531; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 23. **PR** \$5.00. **JE** F15. **KW** Global Integration. Home Country Bias.

AB This paper examines the home country bias in the goods market among OECD countries. An average country imports about two and a half times as much from itself as from an otherwise identical foreign country, after controlling for sizes of exporter and importer, their direct distance, geographic positions relative to the rest of the world and a possible linguistic tie. If one believes that the substitutability among goods produced in OECD countries is high, as it seems reasonable, the observed bias implies relatively small non-tariff barriers. Over 1982-94, the home bias of OECD countries as a whole exhibited a slow but steady decline. The bias in a typical member country of the European Community relative to its

imports from other member countries showed a fifty percent decline during the period.

Weinstein, David

PD June 1996. **TI** Foreign Direct Investment and Keiretsu: Rethinking U.S. and Japanese Policy. **AA** Harvard University. **SR** National Bureau of Economic Research Working Paper: 5612; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 33. **PR** \$5.00. **JE** E62, F13, F14, H20. **KW** Foreign Investment. Japan. Taxation. Financial Policy. International Trade.

AB This paper focuses on two issues. First, a reexamination of the data on the level of foreign direct investment (FDI) in Japan suggests that foreign firms sell five to six times more in Japan than is commonly believed. Previous studies severely underestimated the stock of FDI in Japan due to poor data. Second, after finding that even after adjusting for various factors the level of FDI in Japan is still low, the paper explores explanations for this phenomenon. A second main conclusion is that government tax and financial policy continues to inhibit foreign takeovers through the promotion of stable shareholding.

West, Kenneth D.

TI Business Fixed Investment and the Recent Business Cycle in Japan. **AU** Kiyotaki, Nobuhiro; West, Kenneth D.

Weverbergh, Marcel

TI Strategic Behavior Under European Anti-dumping Rules. **AU** Vandenbussche, Hylke; Pauwels, Wilfried; Weverbergh, Marcel.

Whaley, Robert E.

TI Implied Volatility Functions: Empirical Tests. **AU** Dumas, Bernard; Fleming, Jeff; Whaley, Robert E.

Whalley, John

PD April 1996. **TI** Why Do Countries Seek Regional Trade Agreements? **AA** University of Western Ontario and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5552; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 34. **PR** \$5.00. **JE** F13, F15. **KW** Trade Agreements. Regional Trade.

AB This paper emphasizes the range of factors which enter country calculations to seek regional trading arrangements. These include conventional access benefits, but extend to safe haven concerns, the use of trade arrangements to underpin security arrangements, and tactical interplay between multilateral and regional trade negotiating positions. In a final section, results from an earlier modeling effort by Perroni and Whalley are used to emphasize that non-traditional objectives may be quantitatively more important than traditionally analyzed objectives.

Wheatcroft, Ana-Maria

TI Deducing Implications of Fitness Maximization When a Tradeoff Exists Among Alternative Currencies. **AU** Salant, Stephen; Kalat, Karen L.; Wheatcroft, Ana-Maria.

Whited, Toni M.

PD May 1997. **TI** New Results on Signing Coefficients in Regressions Containing a Proxy. **AU** Whited, Toni M.; Erickson, Timothy. **AA** Whited: University of Delaware. Erickson: Bureau of Labor Statistics. **SR** University of Delaware Department of Economics Working Paper: 97/05; College of Business and Economics, Department of Economics, University of Delaware, Newark, Delaware 19716-2720. **PG** 23. **PR** not available. **JE** C10, C30, C51. **KW** Proxies. Signing Coefficients. Unobserved Regressors.

AB This paper addresses the problem of signing coefficients in regressions containing proxies for unobserved regressors. The authors consider a series of models classified by the stringency of the assumptions used to define them. Their starting point is a model in which the difference between the unobserved regressor and its proxy is correlated with the regression disturbance term and one or more regressors. They then impose restrictions on the model one by one, ending with the classical errors-in-variables model, in which both the regressions disturbance and the error in the proxy are uncorrelated with all other model variables. The authors show that for any set of assumptions we need add at most only two more pieces of information in order to determine the sign of the coefficient on any regressor. In most cases it is necessary to assume a measure of proxy quality exceeds a specified threshold.

Wickens, Michael R.

TI Debt and Deficit Ceilings, and Sustainability of Fiscal Policies: An Intertemporal Analysis. **AU** Uctum, Merih; Wickens, Michael R.

Wickham, Peter

TI Macroeconomic Fluctuations in Sub-Saharan Africa. **AU** Hoffmaister, Alexander W.; Roldos, Jorge E.; Wickham, Peter.

Widgren, Mika

TI The Development of the Division of Power among the European Commission, the Council and the European Parliament. **AU** Laruelle, Annick; Widgren, Mika.

Wilcox, David

TI Mismeasurement in the Consumer Price Index: An Evaluation. **AU** Shapiro, Matthew; Wilcox, David.

Williamson, Jeffrey G.

PD March 1996. **TI** Globalization and Inequality Then and Now: The Late 19th and Late 20th Centuries Compared. **AA** Harvard University and National Bureau of Economic Research. **SR** National Bureau of Economic Research Working Paper: 5491; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. **PG** 20. **PR** \$5.00. **JE** D31, E25, F02, N30. **KW** Globalization. Income Inequality. Inequality Trends. World Economy.

AB The late 19th and the late 20th century shared more than simply globalization and convergence. Globalization also seems to have had the same impact on income distribution: in the late 19th century, inequality rose in rich countries and fell in poor countries; according to Adrian Wood, the same has been true of the late 20th century. Furthermore, while George Borjas and Wood think that globalization accounted for

something like a third to a half of the rise in inequality in America and other OECD countries since the 1970's, the late 19th century evidence suggests at least the same, perhaps more. However, those modern economists who favor a rising inequality explanation coming from (unskilled)-labor-saving technological change will be pleased to hear that it probably accounted for more than a third of the rising inequality in the New World and for more than a half of the falling inequality in Europe. It also appears that the inequality trends which globalization produced prior to World War I were at least partly responsible for the interwar retreat from globalization. Will the world economy of the next century also retreat from its commitment to globalization because of its inequality side effects?

TI Asian Demography and Foreign Capital Dependence.
AU Higgins, Matthew; Williamson, Jeffrey G.

Winter-Ebmer, Rudolf

PD April 1997. **TI** Intra-Firm Wage Dispersion and Firm Performance. **AU** Winter-Ebmer, Rudolf; Zweimuller, Josef. **AA** Winter-Ebmer: Universitat Linz. Zweimuller: Universitat Zurich. **SR** Centre for Economic Policy Research Discussion Paper: 1621; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 15. **PR** 4 pounds or \$8.00. **JE** D31, J33, J53. **KW** Wage Dispersion. Incentives. Firm Productivity. **AB** Personnel economics has suggested conflicting arguments about the impact of increased wage dispersion within firms on workers' productivity and firm performance. Besides giving more advancement incentives, bigger wage differentials might also give rise to less cooperation and more politics between workers resulting in worse outcomes. We try to answer these questions using panel data for Austrian firms. As indicators for firm performance we use employment growth and standardized wages. For white-collar wages the following picture emerges: more dispersion leads to higher earnings up to some point where the relation changes direction. For blue-collar wages we find a positive association between dispersion and standardized wages between firms, but no relation within firms over time. For employment growth the results are ambiguous.

Wise, David

TI Personal Retirement Saving Programs and Asset Accumulation: Reconciling the Evidence. **AU** Poterba, James M.; Venti, Steven; Wise, David.

TI The Wealth of Cohorts: Retirement Saving and the Changing Assets of Older Americans. **AU** Venti, Steven; Wise, David.

Wizman, Thierry

TI Investor Reaction to Salient News in Closed-End Country Funds. **AU** Klibanoff, Peter; Lamont, Owen; Wizman, Thierry.

Wolman, Alexander L.

TI Inflation Targeting in a St. Louis Model of the 21st Century. **AU** King, Robert G.; Wolman, Alexander L.

Wong, Kam-Chau

TI Bounded Rationalities and Definable Economies.
AU Richter, Marcel K.; Wong, Kam-Chau.

TI Definable Utility in O-Minimal Structures.
AU Richter, Marcel K.; Wong, Kam-Chau.

TI Bounded Rationalities and Computable Economies.
AU Richter, Marcel K.; Wong, Kam-Chau.

TI Computability of Preference, Utility, and Demand.
AU Richter, Marcel K.; Wong, Kam-Chau.

Wooders, John

PD December 1995. **TI** Matching and Bargaining Models of Markets: Approximating Small Markets by Large Markets. **AA** University of Arizona. **SR** University of Arizona Economics Working Paper: 95/4; Department of Economics, McClelland Hall, Room 401, P.O. Box 210108, University of Arizona, Tucson, AZ 85721-0108. **PG** 11. **PR** \$2.00 U.S. and Canada; \$3.00 Overseas by air. **JE** C73, C78. **KW** Matching. Bargaining. Market Equilibrium.

AB We show that the equilibrium of a matching and bargaining model of a market in which there is a finite number of agents at each date need not be near the equilibrium of a market with a continuum of agents, although matching probabilities are the same in both markets. Holding the matching process fixed, as the finite market becomes large its equilibrium approaches the equilibrium of its continuum limit.

TI Effects of One-Way Spillovers on Market Shares, Industry Price, Welfare, and R&D Cooperation. **AU** Amir, Rabah; Wooders, John.

TI One-Way Spillovers, Endogenous Innovator/Imitator Roles and Research Joint Ventures. **AU** Amir, Rabah; Wooders, John.

Wooton, Ian

PD February 1997. **TI** Tax Competition for Foreign Direct Investment. **AU** Wooton, Ian; Haufler, Andreas. **AA** Wooton: University of Glasgow. Haufler: University of Konstanz. **SR** Centre for Economic Policy Research Discussion Paper: 1583; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. **PG** 32. **PR** 4 pounds or \$8.00. **JE** F12, F13, F15, F23, H25, H73. **KW** Tax Competition. Economic Integration. Foreign Direct Investment. Regional Location.

AB This paper analyzes tax competition between two countries of unequal size trying to attract a foreign-owned monopolist. When regional governments have only a lump-sum profit tax (subsidy) at their disposal, but face exogenous and identical transport costs for imports, then both countries will always offer to subsidize the firm. Furthermore, the maximum subsidy is greater in the larger region. If countries are given an additional instrument (either a tariff or a consumption tax), however, then the larger country will no longer underbid its smaller rival and its best offer may involve a positive profit tax. In both cases the equilibrium outcome is that the firm locates in the larger market, paying a profit tax that is increasing in the relative size of this market and which is made greater when the tariff (consumption tax) instrument is permitted.

Wright, Robert E.

PD April 1997. **TI** Multiple Job Holding as a 'Hedge' Against Unemployment. **AU** Wright, Robert E.; Bell, David N. F.; Hart, Robert A. **AA** University of Stirling. **SR** Centre for Economic Policy Research Discussion Paper: 1626; Centre for Economic Policy Research, 25-28 Old

Burlington Street, London W1X 1LB, United Kingdom. PG 18. PR 4 pounds or \$8.00. JE J23. KW Multiple Job-Holding. Job Insecurity. Labor Supply. Unemployment.

AB This paper explores a possible link between job security and multiple job-holding in the United Kingdom. It is argued that an individual may hold a second job if they believe that their primary job has a high risk of termination. The reason is that holding a second job may cushion the financial impact of losing the main source of earnings, especially if there is scope for increasing the number of hours worked in the second job. Data from four waves of the British Household Panel Study are used to test this hypothesis. The empirical analysis provides (at best) very weak evidence in support of hedging behavior of this type.

Wu, Wenbo

TI Policies for Green Design. AU Fullerton, Don; Wu, Wenbo.

Xiaoqiang, Wang

TI The Chinese Army's Firm In Business: The Sanjiu Group. AU Nolan, Peter; Xiaoqiang, Wang.

Yeyati, Eduardo Levy

TI Public Disclosure and Bank Failures. AU Cordella, Tito; Yeyati, Eduardo Levy.

Yuen, Chi-Wa

TI Tax Principles and Capital Inflows: Is It Efficient to Tax Nonresident Income? AU Razin, Assaf; Sadka, Efraim; Yuen, Chi-Wa.

TI Capital Mobility and the Output-Inflation Tradeoff. AU Razin, Assaf; Yuen, Chi-Wa; Loungani, Prakash.

Zanello, Alessandro

PD May 1997. TI A Primer on the IMF's Information Notice System. AU Zanello, Alessandro; Desruelle, Dominique. AA International Monetary Fund. SR International Monetary Fund Working Paper: WP/97/71; International Monetary Fund, 700 19th Street, Washington, DC 20431. PG 22. PR not available. JE C40, F31, F32, F33. KW Exchange Rates. Information Notice System. International Monetary Fund.

AB This paper describes the methodology and the data used to compute nominal and real effective exchange rate indices in the International Monetary Fund's Information Notice System (INS). In particular, it highlights improvements to the INS implemented over 1994-96, including modification to the computational methodology, use of updated data, and extension of the INS to recent Fund members.

Zeldes, Stephen P.

TI Social Security Privatization: A Structure for Analysis. AU Mitchell, Olivia S.; Zeldes, Stephen P.

Zenou, Yves

TI Dual Labour Markets, Urban Unemployment and Multicentric Cities. AU Smith, Tony E.; Zenou, Yves.

Zettergren, Goran

TI Monetary Policy and Leading Indicators of Inflation in Sweden. AU Baumgartner, Josef; Ramaswamy, Ramana;

Zettergren, Goran.

Zhang, Wenda

TI Volatility Clustering and Volatility Transmission: A Non-Parametric View of ERM Exchange Rates. AU Artis, Michael J.; Zhang, Wenda.

Zhao, Jinhua

TI Common Ground Between Free-Traders and Environmentalists. AU Karp, Larry; Satchi, Sandeep; Zhao, Jinhua.

Zilibotti, Fabrizio

TI Setting Standards: Information Accumulation in Development. AU Acemoglu, Daron; Zilibotti, Fabrizio.

Zimmerman, David

TI Roc V. Wade and American Fertility. AU Levine, Phillip; Kane, Thomas; Staiger, Douglas; Zimmerman, David.

Zimmerman, Jeffrey

TI Debt Reduction and New Loans: A Contracting Perspective. AU Carlson, John; Husain, Aasim; Zimmerman, Jeffrey.

Zimmermann, Klaus F.

PD February 1997. TI South-North Refugee Migration: Lessons for Development Cooperation. AU Zimmermann, Klaus F.; Rotte, Ralph; Vogler, Michael. AA University of Munich. SR Centre for Economic Policy Research Discussion Paper: 1578; Centre for Economic Policy Research, 25-28 Old Burlington Street, London W1X 1LB, United Kingdom. PG 36. PR 4 pounds or \$8.00. JE F22, H77, O15, O19, O20. KW Migration. Refugees. South-North Relations. Development Economics.

AB As exemplified in the 1995 Mediterranean Declaration of the European Union, migration has become a major concern for European development policies. By enhancing socio-economic conditions through development cooperation, a reduction of South-North migration flows is envisaged. This new approach is examined by analyzing the causes of asylum migration from developing countries to Germany. The econometric findings suggest that support of democracy, economic development and trade will not reduce migration, at least in the medium run, although restrictive legal measures do work. Migration control by international development cooperation therefore seems to need a long-term perspective.

Zingales, Luigi

TI Corporate Ownership Structures: Private Versus Social Optimality. AU Bebchuk, Lucian Arye; Zingales, Luigi.

Zucker, Lynne G.

PD May 1996. TI Costly Information in Firm Transformation, Exit, or Persistent Failure. AU Zucker, Lynne G.; Darby, Michael R. AA University of California, Los Angeles and National Bureau of Economic Research. SR National Bureau of Economic Research Working Paper: 5577; National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138. Website: www.nber.org. PG 13. PR \$5.00. JE D23, L65, O31. KW Human Capital. Technological Breakthrough.

Pharmaceutical Firms.

AB Firms invest differentially in the intellectual human capital required to recognize, evaluate, and utilize technological breakthroughs occurring outside the firm. Such differential investment has been crucial in explaining which incumbent pharmaceutical firms have successfully transformed their technological identities in response to the biotechnological revolution and which are threatened by persistent low performance. While all incumbent firms lagged the dedicated new biotechnology firms in adopting the new drug-discovery technology, firms with higher R&D expenditures before the biotech revolution were more likely to successfully adopt the new techniques and likely to do so earlier. Failure to adopt the new techniques was associated with lower performance compared to firms adopting more fully and faster.

Zweimuller, Josef

TI Intra-Firm Wage Dispersion and Firm Performance.
AU Winter-Ebmer, Rudolf; Zweimuller, Josef.